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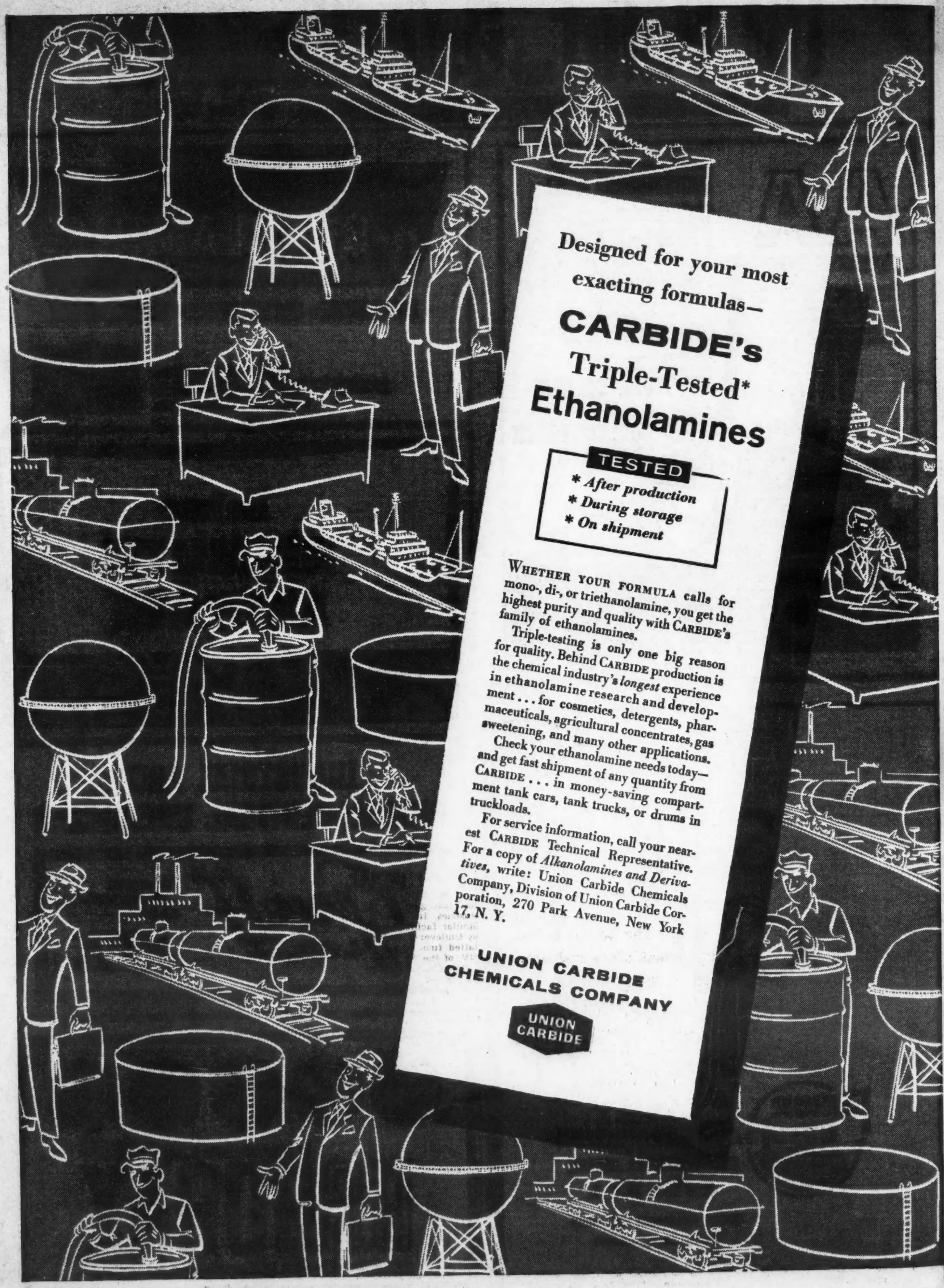

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Oil, Paint and Drug Reporter

Vol. 179 No. 24 30 Church St., New York 7, N.Y. June 12, 1961

Plastics in Ford's Future

Automotive use of plastics should nearly double by 1965, totaling forty-five pounds per car as against a current twenty-five pounds.

This isn't the plastics industry beating its own drum, but a bona fide prediction by auto industry spokesmen. It was made by T. H. Risk and J. R. Forrester, jr., of Ford Motor Company's engineering and research staff, at last week's annual conference of the Society of the Plastics Industry in New York.

The whopping increase, it was said, would result from the continuing introduction of new plastics, together with price reductions and a better understanding of properties, methods of fabrication and end-uses.

Importance of new polymers was demonstrated by reference to the close correlation between the introduction of new plastics and rising auto use in the period 1940 to 1960.

In 1940, eleven plastic materials were available, and automotive consumption amounted to only four pounds per car. By 1960, when use had risen to twenty-five pounds, some twenty-three plastics were available.

Equally important has been the downtrending price, according to Ford's spokesmen. Undoubtedly helping plastics along in this respect, they said, has been the steadily rising tab on steel.

Both price trends are expected to continue, thus narrowing the differential between plastics and steel, and while plastics are not expected to match steel prices on a cost per unit of weight basis, two (polyethylene and polypropylene) are already underselling steel on a basis of cost per cubic foot.

Looking future-wise to the use of plastics for structural automotive components, Ford's spokesmen out-

—Continued on page 53

Chemical Trade Fears Growth Might Be Stunted by President's Plans to Tax Foreign Profits

The Kennedy administration's plans for taxing the undistributed profits of foreign subsidiaries of American companies are a great disappointment to the chemical industry. Spokesmen warn that the President's ideas could stunt the growth of the chemical industry here and abroad. They might slow the normal growth of the general economy and consequently be adverse to the well-being of the people. They could, it is feared, wash out past progress in bringing about international compatibility of national tax systems, and probably be contrary to agreements already in existence.

Warnings of the effects of the proposals on the chemical industry were voiced last week to the house ways and means committee by Robert C. Plumb, member of the tax policy committee of the Manufacturing Chemists' Association.

Plumb's Opinion Bolsters Others

Mr. Plumb's testimony bolstered the objections voiced by others testifying before the committee in opposition to the administration's tax program.

For example, Warren S. Adams, general counsel for Corn Products Company, New York, saw in the program an effective deterrent to continued growth of American foreign trade, which is the "first and soundest instrument with which to forestall, in the long run, balance of payments problems—truly a golden goose." So, "why kill it; or why strangle it even a little?"

Emilio G. Collado, director of Standard Oil Company (New Jersey) said the proposals would "fail to stimulate domestic investment, impair the US balance of payments, render more difficult the job of assisting in the economic progress of the developing nations and weaken, rather than strengthen, the economic unity of the free world."

Mr. Plumb noted that President Kennedy has proposed to tax undistributed earnings of foreign corporations on the basis that the present failure to do so represents a "deferral privilege" extended to US taxpayers that is no longer

—Continued on page 63

WINS APPOINTMENT: William T. McLaughlin, named assistant general manager of the protective coatings division of Pittsburgh Chemical Company, a subsidiary of Pittsburgh Coke & Chemical Company, Pittsburgh, Pa.

Plasticizers: Carbide Closing Gap, Will Integrate Backward to Phthalic

Union Carbide Chemicals Company is coming full circle in the fiercely-competitive plasticizer business. Already a maker of oxo alcohols, the New York-based phthalates producer will now close the remaining raw materials gap via a new 50-million-pound-a-year phthalic anhydride plant at Institute, W. Va. The new unit, which will employ the fluid-bed process, will be built for Carbide by Badger Manufacturing Company. It is slated to be in full operation by the latter part of 1962.

Carbide's decision to make its own phthalic appears to be dictated largely by a belief that a plasticizer maker needs complete raw materials coverage to stay alive in the business these days.

Naphthalene for 'Sevin'

Also figuring in the move is the fact that the concern is already gobbling up vast quantities of naphthalene for its new "Sevin" insecticide (perhaps as much as 20 million pounds for this use alone in 1961).

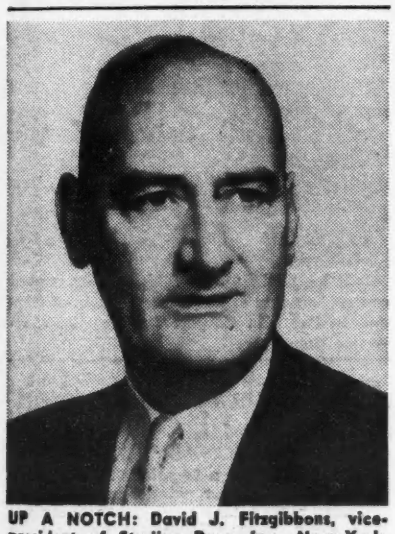
Hardly discouraging, too, is that Carbide—with its growing requirements for naphthalene—will probably have its pick of suppliers when petroleum capacity reaches its expected flood-tide proportions (375 million pounds of new petroleum naphthalene capacity already committed at last count).

While Carbide has quickly come to the conclusion that it will shop around for its naphthalene, rather than make its own, the company is still mulling over whether to enter the free phthalic anhydride market.

If all goes well with its plasticizer operation (an estimated 50 million pounds of capacity plus a 40 percent expansion in progress), the company is confident that it can use all of its PA captively.

As a hedge, however, Carbide has also agreed to supply Food Machinery &

—Continued on page 60



UP A NOTCH: David J. Fitzgibbons, vice-president of Sterling Drug, Inc., New York, advanced to executive vice-president. He is also a member of the board of directors.

Procaine HCl Makers Are Sending an SOS

The country's last two producers of procaine hydrochloride—B. L. Lemke & Co., Inc., Lodi, N. J., and Abbott Laboratories, North Chicago, Ill.—are considering abandoning this business unless the government grants relief from imports.

This was intimated in petitions on file with the Tariff Commission, which last week announced that it was instituting an investigation into the situation to find out if procaine and its salts and compounds (except procaine penicillin) are entering the country in such quantities as to threaten injury to domestic industry.

A public hearing has been scheduled in

—Continued on page 46

'Actol': The Secret Is Out; It's Allied's New Polyether

The secret is out on "Actol." It's the trade name for the new line of polyethers to be marketed to the urethane industry by Allied Chemical Corporation's National Aniline Division.

Disclosure by Allied last week caps a promotional teaser campaign which has had many in the industry guessing for the past month or six weeks.

Commercial quantities of "Actol" are expected to be available in July, soon

—Continued on page 63

Ozone Oxidation Facility Of Emery Goes on Stream

A new $6 million ozone-oxidation plant has just gone on stream for Emery Industries, Inc., at Cincinnati, Ohio, and a similar facility is now under construction by Unilever-Emery at Gouda, Holland. (The latted firm is owned jointly by Unilever NV, of the Netherlands, and Emery.)

The Cincinnati facility is reported to be the largest of its kind in the world, comprising installations for azelaic and pelargonic acids and their esters.

The Gouda plant is due for completion in October. Both plants will use the same basic process as Emery's original ozone-oxidation plant which was completed in Cincinnati in 1953.

Concurrently with start-up at Cincinnati, Emery has posted a price reduction of 3c. a pound for azelaic acid, a major product

—Continued on page 53

Methanol and VAc: Will Capacity Go Up?

Are methanol and vinyl acetate capacities in for an imminent boost? Rumors abound in the trade that Borden Chemical Company is on the verge of announcing two major plants—wholly-owned facilities forming part of the overall $50 million chemical complex of Monochem, Inc., acetylene-and-vinyl chloride-producing subsidiary of Borden and U. S. Rubber Company at Geismar, La.

Borden is not talking at present, but it's more than likely the plants will supply the raw materials Borden needs most: methanol and vinyl acetate monomer.

It's long been known that Borden's methanol needs for its formaldehyde plants are quite extensive, and could run to more than 20 million gallons annually by 1963.

This, plus the fact that the Monochem installation will turn out 80 million pounds annually of acetylene and enough synthesis gas to make as much as 25 million gallons a year of methanol, makes production of the latter seem like a sure bet (OPD, 7/18/60).

It's also been more or less understood

—Continued on page 41

Hercules Plans Two Units To Make Farm Chemicals

Hercules Powder Company will build two new agricultural chemicals facilities at its plant in Louisiana, Mo.

The first unit will produce ammonium nitrate solution and will have an annual capacity of 50,000 tons a year. The second will be geared to an undisclosed ANA (ammoniated ammonium nitrate) capacity.

Hercules headquarters in Wilmington, Del., reports that construction will get under way immediately and should be completed in about a year.

Chemicals Sales: 1960 Was Good, But '61 Will Be Better

If you think chemical sales in 1960 were good—and they were ($27.8 billion for an all-time high)—wait till the returns are in for '61.

These are the pleasant thoughts passed on by John E. Hull, president of the Manufacturing Chemists' Association, last week at MCA's annual meeting in White Sulphur Springs, W. Va.

As Mr. Hull sees the chemical outlook, "sales should continue to expand at a rate somewhat greater than that of industry as a whole, primarily because of the flow of new products."

Clearest indication of a marked upturn in the last half of the year, he feels, are the March chemical sales figures, which were 5.7 percent higher than January.

This he regards as particularly significant because the year opened modestly, with sales up only slightlty.

Chemical industry spending for new plant and equipment this year will top the old 1957 record of $1.7 billion, he believes. These expenditures came to around $1.6 billion in 1960.

Robert C. Tyson, chairman of the finance committee of United States Steel Corporation, New York, expressed concern over the "vanishing incentives" upon which employment and economic growth in America depend.

There is no such thing as a tax incentive, he told MCA. Crusaders who march under the banner of "loophole," he added, may actually "shut off any breathing holes left in the thick blanket of taxation now smothering" growth incentive.

"How ironic if 'loopholing turned out to be 'strangle-holding,' " he observed.

"Any tax at all is a deterrent or 'disincentive,' to use a lately-coined word," Mr. Tyson declared.

"No one is ever normally stirred to

—Continued on page 39

P.A.'s See 1961 Topping '60; Cautious Optimism Keys Report

This report was prepared by the business survey committee of the National Association of Purchasing Agents.

Business will continue to improve throughout the balance of 1961, say purchasing executives in their May report. It is expected that when the books are closed at the end of this year, they will show that 1961 was a better year than 1960. A strong 87 percent of those reporting anticipate a better second half, with the present upward trend being sustained for the balance of the year. A very small 2 percent look for a worse second half. In their December report, our members had indicated that they expected the downdrift current at that time to continue into the second quarter.

When asked if 1961 has measured up to expectations so far, 58 percent reported in May that it has met or exceeded expectations. However, a healthy 42 percent reported that it has fallen short of the mark.

While the above forward "peek" is heartening, remarks of members indicate "no boom" in the making, and "cautious optimism" is still dominant.

However, the definite upward trend noted last month continues in both new orders and production. While the rate of improvement from April to May is not as dramatic as from March to April, it is still pleasantly reassuring.

	Better	Same	Worse
New Orders			
May	48	41	11
April	58	33	9
Production			
May	49	44	7
April	48	40	12

In January of this year, we asked our members to compare their planned capital expenditures for 1961 to their actual capital expenditures in 1960: 22 percent reported they expected to spend more, 48 percent the same, and 30 percent less.

This month we asked them if, in light of the present upturn, they had changed their expectations. It would appear that the business improvement has loosened the purse strings a little bit, as now 29 percent report they expect to spend more in 1961 than 1960, 47 percent the same, and 24 percent less. Even though small, this could serve as further impetus to the gradual improvement forecast for the balance of this year.

It was interesting to note that, in answer to a special question this month, 93 per-

—Continued on page 55

Wyandotte Stakes Out Site on the West Coast

Wyandotte Chemicals Corporation—with headquarters and chief manufacturing facilities at Wyandotte, Mich., and other installations in Louisiana, Mississippi, Georgia and New Jersey—is now staking out a potential plant site for itself on the west coast.

The company has bought twenty-four acres of industrial property at Ontario, Calif., as part of its long-range development program. However, it maintains that exact use of the land has not yet been determined and that no construction dates have been set.

A new Wyandotte plant will open near Toronto, Canada, in October.

IFF Is Building Unit For British Subsidiary

International Flavors & Fragrances, Inc., New York, has started construction of a new plant and company headquarters for its British subsidiary, International Flavors & Fragrances, IFF (Great Britain), Ltd., at Enfield, England.

Scheduled for completion by mid-1962, the facility will include a building for administration and sales as well as separate flavor and perfumery production units, each with its own research and development laboratory.

IFF says the new plant will be about twice the size of the present facility in Enfield, which has been enlarged on several occasions since it was first occupied by the company in 1938.

In addition to the Enfield operation, IFF has an aromatic chemical plant at Haverhill, England, which processes natural materials as well as synthetic chemicals for both flavors and fragrances.

Hercules Boosts Fatty Acids

Hercules Powder Company, Wilmington, Del., will advance prices of tall oil fatty acids on July 1. New tankcar prices, f.o.b. works, freight equalized, are 8 cents a pound for 1.5 percent rosin acids, 7 cents a pound for alkyd grade 4 percent rosin acids, and 6½ cents a pound for 5 percent.

Baird Sorbitol Venture: Spring '62 Startup Seen

Baird Chemical Industries, Inc., which recently announced plans to become a sorbitol producer (OPD 3/27/61) is expected to begin shipping material by the spring of 1962.

Although details have not been confirmed, it's understood the plant will be located somewhere in Illinois with a capacity of at least 20 million pounds yearly.

The facility reportedly will employ a new process based on Baird's own work and a license from one of Europe's largest and oldest sorbitol producers.

The Week's Price Changes

Lemon Oil, Linseed Oil, Peanut Oil, Tung Oil Advanced. Ethylenediamine, Lard, Procaine Hydrochloride Reduced.

Prices Advanced

Lemon oil, California, 35c. per lb. (p. 52).
Linseed oil, 3/10c. per lb. (p.51).
Oiticica oil, ¼c. per lb. (p. 51).
Peanut meal, $2 per ton (p. 51).
Peanut oil, crude, ¼c. per lb. (p. 51).
Refd., ¼c. per lb. (p. 51).
Tung oil, ¾c. per lb. (p. 51).

Prices Reduced

Cocoa butter, 1c. per lb. (p. 51).
Coconut oil, ½c. per lb. (p. 51).
Copra, $3 per ton (p. 51).
Cottonseed oil, crude, ¼c. per lb. (p. 51).
Refd., ¼c. per lb.
Corn oil, crude, ½c. per lb. (p. 51).
Refd., ½c. per lb. (p. 51).
Ethylenediamine, 2c. per lb. (p. 51).
Greases, ½c. per lb. (p. 51).
Lard, cash, 3/10c. per lb. (p. 51).
Linseed meal, $3 per ton (p. 51).
Procaine hydrochloride, 15c. per lb. (p. 51).
Soybean meal, $4 per ton (p. 51).
Soybean oil, crude, ¾c. per lb. (p. 51).
Refd., ¾c. per lb. (p. 51).
Tallow, ½c. per lb. (p. 51).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

June 9, 1961	June 2, 1961	June 10, 1960
113.65	113.46	110.31

Dispersions Pacing Vinyl Growth

Standing highest on today's plastics growth ladder are vinyl dispersion resins. From a modest 25 million pounds in 1952, production of these fast-steppers is expected to zoom to 125 million in 1962, with total volume of vinyl hitting 250 million pounds. Impelling the phenomenal growth rate will be the well-known versatility of vinyls, making them candidates for "an almost infinite variety" of applications.

Such is the view of Robert T. Henson, of Flexible Products Company, a past chairman of the vinyl dispersion division of the Society of the Plastics Industry.

Versatility, as Mr. Henson defines it, is "the ability to be compounded accurately for a wide variety of superior properties, to be adapted to many methods of conversion, and to be produced at low cost."

Outstripping GNP Growth

Addressing SPI last week at its New York meeting, he noted that plastics are outstripping the growth of the gross national product, that vinyls are tops in the plastics field, and that dispersion resins are leading the vinyl group "and still accelerating."

Few other materials, he said, can offer the range of properties inherent in vinyl dispersions—ability to reproduce detail, softness and flexibility or hardness and toughness, fire resistance, infinite color possibilities, excellent light stability and "outstanding chemical resistance."

Then, too, Mr. Henson went on, "these liquid dispersions are easy to handle and process, requiring only simple heating to convert to the end product—no expensive and heavy duty machinery or molds are necessary."

Submitting a five-page list of end products and processing methods to his audience, Mr. Henson declared that "vinyl dispersions have grown up."

"Here," he concluded, "is a material and technology made to order for an almost infinite variety of products—your own vivid imaginations will key the developments in this field in the future."

DIVISION CHIEF: James M. Cleney, named general manager of the Ozalid Division of General Aniline Film Corporation, New York, effective July 1.

Citric Plant Going Up

Miles Chemical Company has broken ground in Haifa, Israel, for a 1,500-ton-a-year citric acid plant. Some 60 percent of the plant's output is slated for internal consumption. The unit will be on stream during the Spring of 1962.

Ammonium Phosphate Unit To Start Rising This Week

Construction on a $4 million ammonium phosphate fertilizer plant is slated to get under way this week near suburban Pine Bend, Minn. Northwest Cooperative Mills, jointly owned by four local co-ops, expects to have the facility operating by next April, according to reports from the National Plant Food Institute.

The facility will turn out 100,000 tons of water-soluble fertilizer yearly, NPFI reports.

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OIL, PAINT AND DRUG REPORTER, Vol. 179, No. 24, June 12, 1961. Published weekly on Monday by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U.S.A. Second-Class postage paid at New York, N. Y. Single copy price: 50 cents. Subscription prices:—United States and Possessions, $5 a year; Canada and Newfoundland, $7; other countries, $12. Copyright, 1961, Schnell Publishing Company, Inc.

IN TECHNICAL POST: Dr. Howard Steinberg, named director of chemical research for United States Borax Research Corporation, Anaheim, Calif.

Hydrogen Peroxide Due From FMC Unit

Food Machinery & Chemical Corporation, San Jose, Calif., has come up with a two-pronged idea for developing the naval ordnance facilities it recently purchased (OPD, 4/17/61) from the government at South Charleston, W. Va.

On the agenda:

- First, a big, new hydrogen peroxide plant.
- Then, an overall survey by Bechtel Corporation to determine where else the installation can fit into FMC's scheme of things.

At the just-acquired site, FMC will use a new and highly-developed organic process which was brought about in the corporation's Becco Chemical Division laboratories. The process reportedly incorporates many novel and unique features not currently in use with the typical anthraquinone process.

The company is keeping very quiet on what the capacity of the new installation will be. Officials do reveal, however, that construction is slated to start promptly and that full output is expected by late 1962.

Hydrogen, the main raw material for the organic process, will be available from the company's chlor-alkali plant in South Charleston.

Becco currently makes hydrogen peroxide by the electrolytic process at Buffalo, N.Y., and Vancouver, Wash. Just what the output is is confidential company information, however.

Rexall Chemical to Start Polypropylene Marketing

Rexall Chemical Company, Paramus, N. J., a division of Rexall Drug & Chemical Company, will begin marketing polypropylene resins on July 1.

A spokesman for the company states that this involves resale agreements similar to the company's existing program for conventional high pressure polyethylenes and linear low pressure polyethylenes.

The new program has two objectives:

- To provide Rexall customers with a complete line of polyolefins.
- To enable Rexall to work with customers on a commercial basis "to develop the type of resin improvements required in future polyolefin product lines."

Polypropylene will be available at Rexall warehouses in Holyoke, Mass., Chicago, and Santa Ana, Calif.

FDA's Gift to Labeling Law: A Booklet on How to Comply With Rules That Don't Exist

Trade associations in the chemical field are burning up these days over Food & Drug Administration's latest production: a zany booklet that tells exactly how to comply with hazardous labeling law regulations that have never been established. Unbelievable as it seems, FDA has just issued the booklet advising manufacturers how to revise their product labels to bring them in conformity with the new law, even though the regulations are only in tentative form—and are still waiting comments by industry and even finalization by the agency itself.

FDA Commissioner George P. Larrick has been peppered with letters of protest and indignation ever since the pamphlet came out. He has been asked whether FDA has not prejudged the issues involved in the regulations and has been urged to stop further distribution of the booklet.

Larrick Won't Comply

Mr. Larrick said last week, however, that he has no intention of taking such action and defended the issuance of the pamphlet as an aid to industries which might wish to comment on the regulations.

He said that preparation of the pamphlet was no secret; that while its text was not available it had been discussed with the sixteen organizations interested in the new law. He added that he told them what was to be in it and thought industry could comment more effectively after it had the pamphlet.

Distribution of the booklet, he added, had been largely through the organizations themselves and very few have been mailed out by the FDA. He was sorry if any confusion has resulted, but there shouldn t be, he continued, because the pamphlet makes note of the fact that the regulations are still to be issued under the law.

[There were some rumbling's, however, that indicated FDA's "tough" policy might not prevail. At the MCA convention in White Sulphur Springs, W. Va., John Hull, MCA's president, digressed from his prepared speech long enough to drop a word. He said that, following conversations with FDA Commissioner Larrick, the latter agreed that some revision in the regulations is called for. However, up to OPD's press time on Friday (June 9) Mr. Larrick could not be reached for comment.]

Among the associations filing protests are: Manufacturing Chemists' Association, Chemical Specialties Manufacturers Asso-

—Continued on page 36

LAB HEAD: Dr. Maurice J. Kelley, appointed director of research labroatories by Diversey Corporation, Chicago. Dr. Kelley had previously been with Nopco Chemical Company, Harrison, N.J.

Polyethylene Facility Goes Into Full Swing

A new polyethylene plant at Victoria, Tex., is now in full commercial production, put that way by E. I. duPont de Nemours & Co., Wilmington, Del. The multi-million-pound plant for "Alathon" polyethylene resin will provide additional capacity for the packaging industry and other major markets.

"The plant has been constructed as part of a major expansion program of the company's polyolefins division," according to Roy L. Schuyler, director. Another new unit, currently under construction, will bring the company's capacity in both high-pressure and low-pressure varieties to about 400 million pounds annually.

The plant at Victoria will produce conventional low-density polyethylene by a high-pressure process.

DuPont also manufactures high-density polyethylene—50 million pounds a year of it at Orange, Tex.

The Victoria unit represents a second

—Continued on page 62

Wyandotte Polyether Unit Is Completed in New Jersey

A two-phase reactor plant for manufacture of polyether products has been completed for Wyandotte Chemical Corporation in Washington, N. J.

The new plant will enable the Wyandotte, Mich.-based chemical company to service more economically its expanding eastern markets. Wyandotte has other manufacturing facilities in California, Mississippi, Georgia and Louisiana. A third reactor is presently under construction of the forty-acre site in New Jersey.

Plastics Increase In Package Field: 19 Percent/Year

Taking a "Forward Look for Plastics in Packaging," Donald R. Mahaney, of Monsanto Chemical Company, says he can see 1965 sales volume at $800 million, representing a compounded growth rate of 19 percent a year.

Plastics' share of the overall packaging market will have doubled from a current 4.2 percent to 8 percent by '65, according to Mr. Mahaney's projection, with the growth concentrated in these three major areas:

- Unsupported flexible plastic films.
- Plastic containers and closures—that is, rigid packaging.
- Combinations of plastics with other materials, such as plastic-based laminates.

Mr. Mahaney, whose market research projections were heard at last week's meeting of the Society of the Plastics Industry in New York, names population growth, the trend toward self-service in variety stores and increasing concern with sanitary codes as factors in the packaging boom.

One of the most dynamic of US industries, packaging of consumer goods has been growing at a rate of better than 8 percent a year, or double that of the gross national product, Mr. Mahaney notes. Volume in 1959 was $6.6 billion, up from $5.9 billion two years earlier.

By 1965, approximately 540 million pounds of flexible plastic film will be consumed in packaging, he predicted at the SPI meeting.

More than 75 percent of this is expected to be of the polyolefin variety—polyethylene and polypropylene films.

The balance of 112 million pounds will include the specialty films, among them vinyls, oriented styrene, vinylidene chloride, water-soluble polyvinyl alcohols and polyesters.

Highlighting polyethylene's performance, Mr. Mahaney said, will be prepackaging of produce, reflecting the increasing emphasis on self-service, eye-appeal and operating efficiency in packaging.

As polyethylene has already achieved a high level of penetration in laundry and dry cleaning packages, growth in

—Continued on page 49

Caprolactam Buildup Race Running in United Kingdom

Imperial Chemical Industries, Ltd., and Courtaulds, Ltd., will add 25,000 tons a year to British caprolatam capacity.

ICI reportedly will use the Swiss Inventa process for its caprolactam unit with a capacity of 15,000 tons a year and Courtaulds will use the Snia Viscosa process for its 10,000 ton plant.

Action of the two companies follows earlier steps by British Enka, UK associate of the Dutch Firm, Algemene Kunstzijde Uni (AKU). Reason for the expansions is a boom in nylon 6 plans, which includes a 20-25 million pound Courtaulds plant and one presumably 50 percent larger by ICI.

Chemicals Lure Grace To Australia, Colombia

W. R. Grace & Co., New York, is up with two new chemical ventures at widely-separated points on the globe.

Dewey & Almy Pty., Ltd., an operating subsidiary of Grace's Overseas Chemical Division, will acquire the assets of W. J. Manufacturing Company's wholly-owned chemical manufacturing subsidiary, Waratah Chemicals Pty., Ltd. The Grace unit expects to manufacture a range of industrial chemicals at Brookvale near Sydney, Australia.

Probst y Cia, Ltda., another Grace subsidiary, has completed the first formaldehyde plant in Colombia. The facility, which has a daily formaldehyde capacity of ten tons, will supply the small but growing Colombian market with raw material for melamine, phenolic and urea-formaldehyde resins.

OPD Reports From Europe

USSR Chemical Buying: Did 'Hard Sell' Really Sell?

The chemical industry commissars in Moscow are now recovering from a concentrated two-week dose of western salesmanship, British-style, but it will apparently be many months before the thirty-one chemical and drug producers who joined 600 other UK companies in a "hard-sell" British Trade Fair in Russia will know whether or not their efforts were successful.

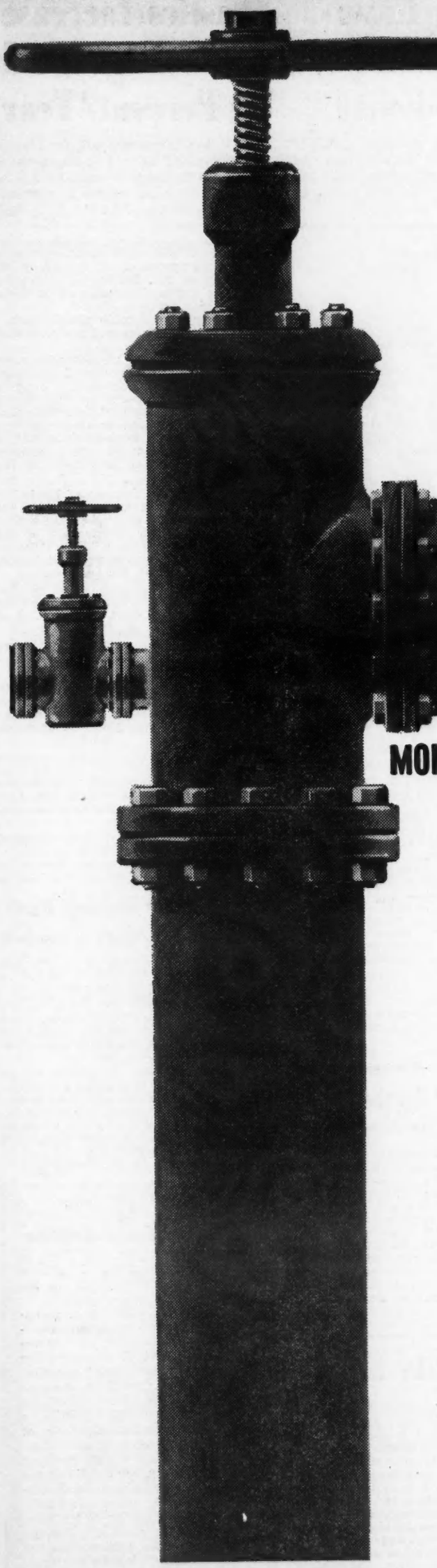
The biggest chemical deal announced at the fair was pulled off by Vickers, Ltd., which signed up an $11.2 million nylon 66 fiber plant. This plant, though, is an extension into finished products of another Vickers chemical plant sold to the Russians earlier, and discussions on the latest order started long before the Moscow fair.

The hard truth that company expense account auditors in London will be hearing from their Moscow salesmen in coming months is that it takes about a year to go from the first enthusiastic Russian inquiry to a signed sales contract.

A basic fact about the Communist business system British executives are learning to live with is that the industrial customer in Moscow doesn't have any money. After the industrial organization decides to buy a Western product, plant or process, it then has to go to other agencies and persuade them to release the foreign exchange necessary to make the purchase. And that, in any government, is very time-consuming.

Despite these problems and the relative scarcity of signed contracts, most British exhibitors return from the fair believing it a huge success. Contracts by all exhibitors signed during the fair totalled between $28 and $30 million. And officials say discussions are continuing on a large

—Continued on page 58



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PRINCIPALS IN MAJOR SALES APPOINTMENTS: The chemicals division of Glidden Company, Cleveland, Ohio, has just named Ralph B. Quelos (left) general sales manager in charge of pigments and colors, with headquarters at the Adrian Joyce Works in Baltimore, Md. In a similar action, James C. Rankin (right) has been named general sales manager for metals and organic chemicals, with headquarters in Cleveland. Both men are long-time executives with Glidden.

Fats and Oils Scarcity Overseas: It Lifts Hopes for Increased US Sales

Output of fats and oils outside the US is not keeping up with the growth in world population and the increase in per capita consumption. As a result, overseas demand for US-produced fats and oils should rise during the 1961-62 marketing season, and scheduled increases in foreign aid distribution of these products are expected to increase the demand level further. So reported Clifford H. Keirstead, of Glidden Company's Durkee Famous Foods Division, at last week's meeting of the National Association of Purchasing Agents in Chicago.

SALES EXECUTIVE: Dr. Arthur Davis, named sales manager of Geigy Industrial Chemicals, a division of Geigy Chemical Corporation, Ardsley, N.Y. Previously, Dr. Davis had been with Sun Chemical Company.

For lard, however, Mr. Keirstead had a different story to tell.

More lard is now available locally in Europe, he noted, and "the Cuban situation is not favorable for trading in volume." On top of this, lard output in the US is expected to rise sharply.

US Stocks Can Ease Off

Because of good overseas demand for fats and oils, Mr. Keirstead felt that a substantial reduction in US stocks could be achieved between now and the end of the current marketing year.

Domestic consumption of fats and oils, he said, would probably line up with the anticipated population increase of 1.7 percent. This has already proved true during the opening months of the season, he noted.

Turning to olive oil, Mr. Keirstead predicted in a speech before the food industries' buyers group that output in the Mediterranean basin would be 8 percent below last year's. Output in Spain should be off 22 percent, while Italy's production is expected to increase 4 percent.

The outlook for rapeseed oil, he said, is for production about equal to last year's 40,000 to 42,000 tanks of oil.

He said that palm oil and palmkernel oil output may return nearer to normal in 1961, as last year's downturn was caused by difficulties in transportation and trained manpower that have since been cleared up.

Mr. Keirstead demonstrated that an ex-

—Continued on page 50

Urea Seen No Threat To Oilseed Meal Sales

Urea in the days ahead will probably be used on an increasing scale in livestock feeds, but the chemical does not appear to offer a serious threat to the meal market. So reports Department of Agriculture after conducting a survey of the material's use as a replacement for part of the high-protein oilseed meals in feeds.

The use of urea in rations for ruminants has become widespread, but there are still questions concerning the percentage of the meals that can be replaced by

—Continued on page 45

Drug Probe Reopens July 5

The Kefauver committee of the senate will reopen its drug industry hearing July 5 with testimony from the American Medical Association on the Kefauver-Celler antitrust bill (S-1552). The AMA will be followed by testimony from members of the patent committee of American Bar Association and by officials of Food & Drug Administration.

Whither Plastics? Output in '75: 25 Billion Lbs.; Conventional PE: 1.6-Billion-Lb. Market by 1965

Wither plastics materials? The air was thick with glowing predictions last week at New York's Coliseum, site of the ninth National Plastics Exposition. Here's a sampling: Output of plastics materials should approach 25 billion pounds in 1975, compared with nearly 6.5 billion pounds today . . . US producers of convention polyethylene will be serving a 1.6-billion-pound market by 1965 . . . The market for plastic building materials will rise from $450 million today to $4.5 billion by 1970 . . . Sales of high-density polyethylene resins will reach 233 million pounds this year for a 37 percent gain over 1960.

The 1975 sighting was made by Dr. Hugh L. Dryden, deputy director of the National Aeronautics & Space Administration, at opening ceremonies for the five-day trade show—the largest (260 exhibitors and 35,000 in attendance from here and abroad) in the history of the $4 billion plastics industry.

The long-range crystal ball for conventional polyethylene was wielded by Vincent D. McCarthy, director of plastics sales for U. S. Industrial Chemicals Company, New York, a division of National Distillers & Chemical Corporation.

PE Growth: 7 Percent a Year

Mr. McCarthy feels that the average rate of PE growth between now and 1965 will be around 7 percent a year, as against the 25 percent growth rate that prevailed in the late 1950's.

To his way of thinking, this is "a clear indication that the industry has matured." However, he is convinced that there "is still reasonable growth ahead."

To this he adds one cautionary note: "Rated production capacity for conventional polyethylene today is close to 1.7 billion pounds, or already large enough to handle the 1965 projected demand."

Conventional PE Market: 1965

Film and Sheet	610 million lbs.
Substrate Coating	250 million lbs.
Injection Molding	235 million lbs.
Wire and Cable Coating	170 million lbs.
Export	150 million lbs.
Miscellaneous	85 million lbs.
Extruded Pipe	70 million lbs.
Blow Molding	60 million lbs.
Total	1,630 million lbs.

As Mr. McCarthy sees it, "polyethylene film will continue to match all other polyethylene uses combined in terms of dollar sales for at least the next four years."

Packaging film, he thinks, will continue to account for about 75 percent of the overall polyethylene film-sheet consumption through 1965.

Consumption of conventional polyethylene film for packaging, he reckons, is likely to reach 460 million pounds by 1965.

Non-packaging film, he figures, will to-

—Continued on page 33

MCA's NEW CHAIRMAN: Howard S. Bunn, of Union Carbide Corporation, New York, elected last week as board chairman of Manufacturing Chemists' Association. (See separate MCA story on page 3.)

NACA Staff Reorganized; Ferguson to Head Board

Plans have been made for the reorganiaztion of the National Agriculture Chemicals Association staff.

Effective September 1, 1961, the beginning of the association's fiscal year, the NACA board approved an organization plan providing for a chairman and a vice chairman of the board, whose method of election and duties will be the same as now prescribed for the president and the vice-president of the Association; a full-time president to replace the present position of executive secretary; a secretary; a treasurer; a technical director; and a director of information.

Named by the board of directors to fill these positions were Dr. George R. Fer-

—Continued on page 39

W&T Signs a Pact On Olefin Catalysts

Catalysts used in high-pressure polyethylene manufacture are about to be produced in Japan under the terms of an agreement signed by Wallace & Tiernan, Inc., Belleville, N. J., and Yoshitomi Pharmaceutical Industries, Ltd., Osaka.

The catalysts will be produced by a company just organized by the American and Japanese concerns. Established on a 50-50 capitalization basis, it is subject to approval by the Japanese government.

In the United States the catalysts are manufactured by the W&T's Lucidol Division, Buffalo, N. Y.

The division's engineering department is preparing construction drawings and equipment specifications for the commercial plant in Japan. Construction will start as soon as the Japanese government has given its approval. It is hoped that production will commence during the first quarter of 1962.

The Lucidol Division is reportedly the largest US supplier of organic peroxides to the plastics industry and is currently constructing a new chemical research center near Buffalo to provide additional

—Continued on page 35

Hydrogen Peroxide Propels Daedalus' Modern Offspring

Move over Daedalus and Icarus! Man is soaring to heaven on wings of hydrogen peroxide.

This was made startlingly clear late last week when Harold M. Graham of Bell Aircraft Corporation successfully demonstrated a rocket belt at Ft. Eustis, Va.

With a 100 pound piece of equipment strapped to his back and looking vaguely like a skindiver with horns, Mr. Graham soared 150 feet through the air in one test-flight and traveled a longer distance in a later aerial perambulation.

What sort of impact could this make

—Continued on page 53

Surfactants: Potential Pep Pills for the Herbicides?

If weedkilling isn't a complex enough operation already, Department of Agriculture scientists promise to make it so by bringing surfactants into the picture.

More importantly, as the USDA researchers now see it, surfactants could make the job less expensive and more effective, but it's conceded that further studies are in order before 2,4-D formulations with surface active agents become a reality.

Right now there are too many variables that need to be pinned down. According to USDA studies with over 100 surfactants, a single such agent may increase, decrease or simply not affect the action of herbicides depending on the amount of the chemical, the changes that occur while in use and the plant sprayed.

Thus, precise formulations would have to be made to meet specific crop-weed conditions. That's the direction in which USDA's continuing research will be aimed. Meanwhile, the agency has released these findings:

- One surfactant, an alkylphenol ethylene oxide condensate, was used in a series of herbicidal sprays applied to corn as test plants. The agent increased the killing action of "Dalapon" seven-fold and trebled "Amitrole" activity, but had no effect on 2,4-D and DNBP action.
- On soybeans, the same surfactant doubled the action of "Dalapon" and "Amitrole" and trebled the action of 2,4-D and DNBP.

Why do surfactants have such variable effects on herbicides?

Scientists don't know all the answers, the report says, "but they do know that when surfactants are used at concentrations which have the most influence on a herbicide's activity, there are few

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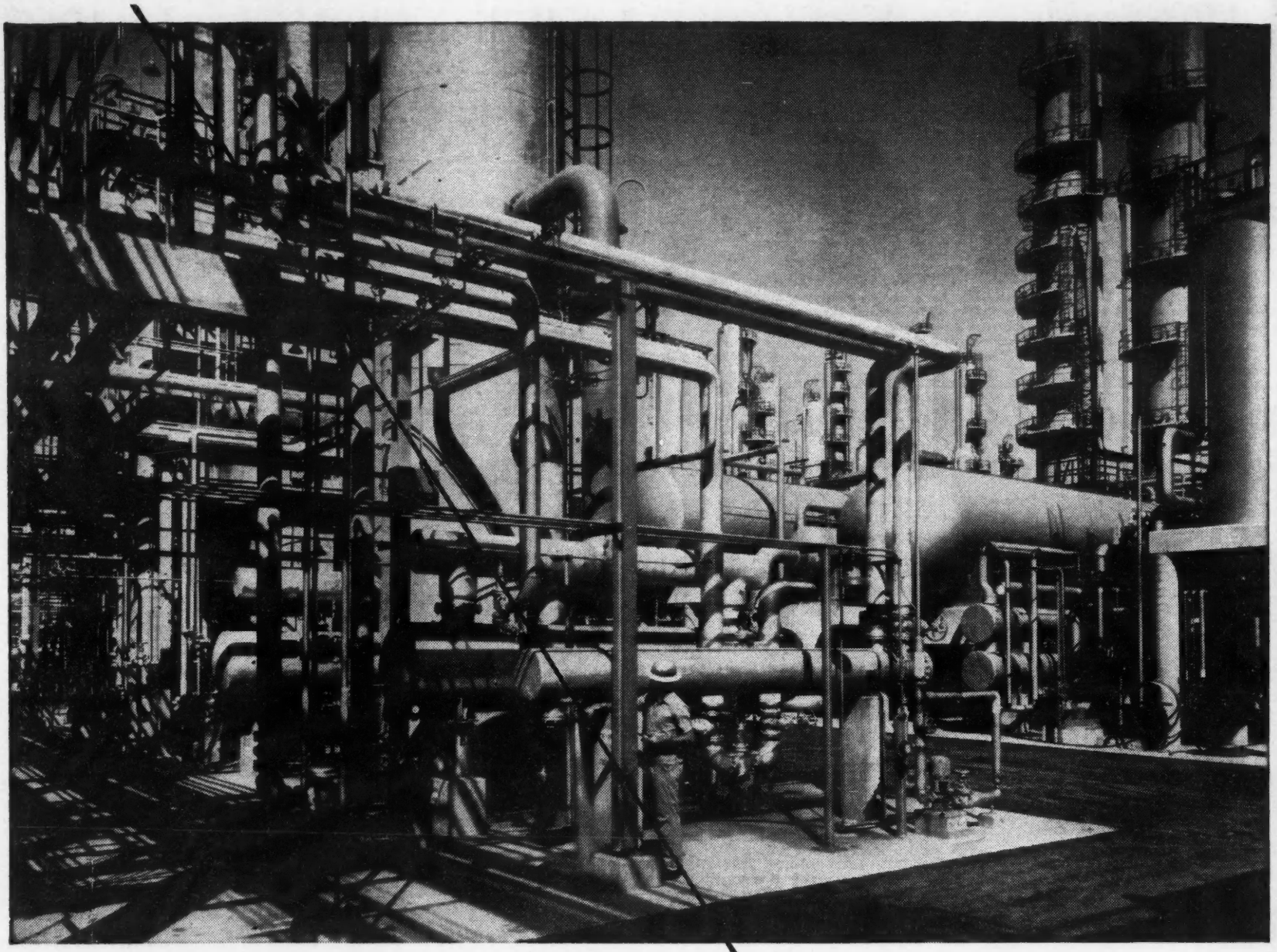
Meeting Dates
May Be Found
On Page 9

Important Quality Improvements in *Petro-Tex n-BUTENE-1*



Deliberate removal of undesirable olefins from our commercial production of Petro-Tex n-Butene-1 has resulted in a very substantial quality improvement over the past two years.

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SCHNELL PUBLISHING COMPANY, INC., 30 Church Street, New York 7, N. Y.
(RE 2-9820) Cable Address: Reporter, New York
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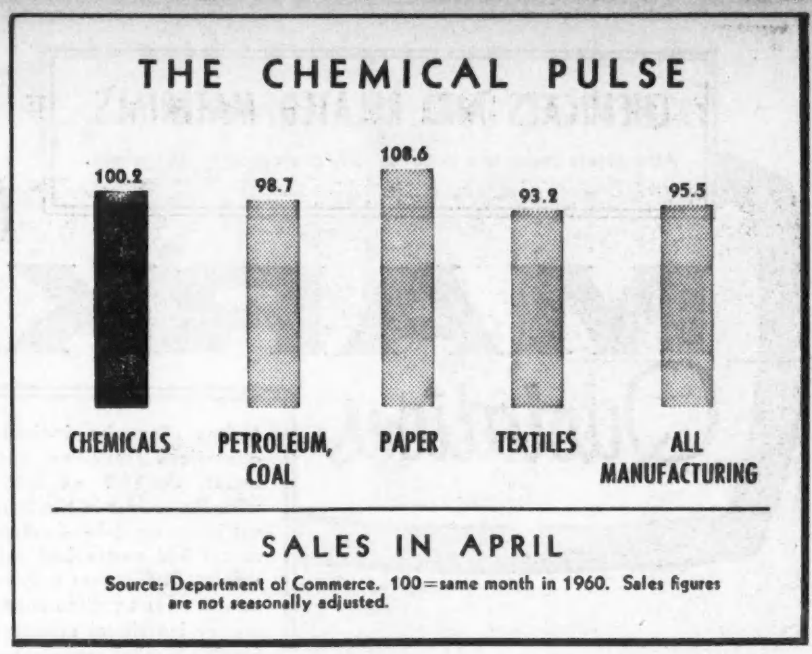
Volume 179 June 12, 1961 No. 24



Drug Standardization

Establishment of Drug Standards Laboratory has been announced by the American Pharmaceutical Association Foundation, with the information that the primary function of the laboratory will be to "provide direct, convenient laboratory services to the National Formulary and the United States Pharmacopeia as an aid in their respective revision programs." The laboratory will be located in the American Institute of Pharmacy building in Washington.

The most interesting aspect of this logically promotive enterprise is that it will be financed by equal contributions from the American Medical Association, the American Pharmaceutical Association and the USP organization.

Although one may have reason to suspect this, that, or something, he can only guess why no part in the providing of this desirable project has been given to the Pharmaceutical Manufacturers' Association, whose members must do most of the complying with drug standards, the Food & Drug Administration and the National Association of Boards of Pharmacy which must enforce such standards, and the National Association of Retail Druggists, whose members are responsible to the public and the practicing physician in the observance of such standards. Each and all of these groups are certainly more entitled to and qualified for such participation than is the American Medical Association.

It must be admitted that pharmaceutical manufacturers and retail druggists are actively represented in the functionings of the groups which have to do with the determination of USP and NF standards. It may be that full recognition of this fact has influenced the promoters of the standards laboratory to "excuse" their organizations from contributing financially to the undertaking. But, those organizations should have full recognition in an advisory capacity—it could be that they have; the announcement does not cover operational details. The statement of general principles of quality control in the drug industry, adopted by the PMA board of directors about six weeks ago, certainly has a most pertinent applicability in that connection.

That K-K Confab

There are various reasons why it is a good practice for competitors to get to know one another at first hand. But, very few, if any, such reasons have any logical application to the recent getting together by John F. Kennedy and Nikita S. Khrushchev. While their competition may in some instances be somewhat in the same field, it is not conducted under the same rules or methods.

Nothing that has been said by any commenter on the "summit" meeting —and, most of all, what has been said by the summiteers—indicates that their talking was anything more than talk. Nether party gave an inch or got an inch on any major matter. The only logical conclusion must be that what was said actually meant little if anything.

Reports have it that the few Soviets who have had anything to say about the summit conference are hopeful that it will lead in some manner to an easing of tensions between East and West. The only support for such an expectation is to be found in the reported agreement that an effective cease-fire condition was of prime importance as a prerequisite for any satisfactory approach to a solution of the problem of Laos. There is some reason to believe that the President and the Soviet Premier at least got somewhat close to an agreement that that question should be solved in terms of satisfactory freedom for the Laotians—but how was still up in the air.

In any consideration of the Vienna conference, it must be recognized that President Kennedy did not talk with Russians; he talked only with THE Russian. But, there is much encouragement in recognizing that, as the Prime Minister of Canada said on the first day of the conference, "President Kennedy is speaking for Canada and the other Western nations."

The duPont-GM Case

It is sincerely to be desired and hoped by all who believe in fair play that the US Supreme Court will comply with the request of E. I. duPont de Nemours & Co., reported on page 3 last week, that at least the time-limit aspects of the court's ordering of the disposition of the company's holdings in General Motors Corporation be eased. The request is based on sound, just reasoning—which is more than can be said by impartial commenters with respect to the high court's ruling in the matter, which, to the more thoughtful of them, goes even beyond the Kefauver concept of the purpose and the scope of that combination in restraint of trade, known as the "anti-trust law."

One need not go fully along with one critic's questioning of the justice of the decision and the "competence of the court to render a decree so revolutionary and upsetting to business and, most of all, burdensome to hosts of innocent stockholders," to join him in declaring that "congress should act to nullify the grave injustice both to industry and the investing public"—at least to the extent of preventing any further application of such a ruling to the numerously common inter-company holdings which are in no way monopolistic in any accurate sense of that term.

Meetings

ACHEMA 1961, German chemical engineering exposition and congress, Frankfurt am Main, Germany, June 9-17.

Air Pollution Control Association, annual meeting, Commodore hotel, New York, June 11-15.

American Chemical Society, national meeting, Chicago, September 3-8.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 25-30.

American Soybean Association, annual convention, Claypool hotel, Indianapolis, Ind., August 28-29.

American Tung Oil Association, annual meeting, Edgewater Gulf hotel, Edgewater Park, Miss., September 26-28.

Armed Forces Chemical Association, annual meeting, Statler-Hilton hotel, Washington, D. C., September 13-15.

Association of Food & Drug Officials of the United States, annual conference, Mayflower hotel, Washington, D. C., June 18-23.

Chemical Industries Exposition, Coliseum, New York, November 27-December 1.

Chemical Market Research Association, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 11-12; Mark Hopkins hotel, San Francisco, November 28-December 1.

Drug,Chemical & Allied Trades Association, spring luncheon meeting, Commodore hotel, New York, June 21; annual meeting, Pocono Manor Inn, Pocono Manor, Pa., September 14-17.

Federation of Societies for Paint Technology, annual meeting, Shoreham and Sheraton-Park hotels, Washington, D. C., November 2-4.

Gordon Research Conferences, petroleum, Colby Junior College, New London, N. H.; chemistry of coal, New Hampton School, New Hampton, N. H., lipide metabolism, Kimball Union Academy, Meriden, N. H., June 12-16.

National Agricultural Chemicals Association, annual meeting, The Homestead, Hot Springs, Va., October 29-November 1.

National Chemical Exposition, sponsored by the Chicago section of the American Chemical Society, International Amphitheater, Chicago, September 5-8.

National Paint, Varnish & Lacquer Association, annual meeting, Statler-Hilton hotel, Washington, D. C., October 30-November 1.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 11-14.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, June 13.

Washington Talks It Over

FDA Hasn't Given Up the Idea; It Is Just Looking Around for Another Way to Inform the MD's All About the Good and the Bad of the Numerous New Prescription Drugs.

By Ralph L. Cherry
Washington Editor

It's been almost six months since Food & Drug Administration asked for comments on its proposal that would require drug manufacturers to include a copy of the official brochure in each sales package of prescription drugs.

So much time has elapsed, with nothing more heard of the plan, that some odd reports are beginning to arise. Among them is one that says the matter is being shelved by the agency in line with industry's assertions that it can never accomplish the aims sought and will simply be an expensive burden on small producers.

The fact is this: The hope is not dead —it is still under very active consideration, but officials are having a time in trying to figure out a way to make it work.

The idea that doctors can learn all they need to know of a drug by reading the brochure accompanying the sales package seems to have been pretty well discounted by the fact that the doctors seldom see the packaged product. It is the pharmacist who would be getting this information and he's not the one who needs it.

Consequently, much thought is being given to an alternative suggestion that the job of keeping the doctors informed be taken over by some centralized agency in the trade. Manufacturers would forward the necessary information to this agency, which in turn would see to it that it reached the practitioners.

But there again, FDA knows of no one agency that would reach all the doctors. American Medical Association, which has offered to undertake the job, would reach most, but not all the practitioners the FDA wants to be sure are reached. For example, AMA's mailing list would not include osteopaths or dentists.

FDA wants to be certain that the entire field is covered and it would like the job to be undertaken by private industry. Probably some jointly-sponsored agency will be the answer.

Officials report that the problem of doctors not being informed of all the facts concerning a new drug—the bad as well as the good points—does not seem to be as great now as it was before as producers are making greater efforts to keep practitioners advised of all deevlopments concerning their products.

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, June 9 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

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bbls. bgs. smaller lots, frt. alld lb. .36½- —
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Acetic acid, coml. or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80% bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, cms., c.l., dlvd. E 100 lbs. 18.75 - —
tech., dms., c.l., dlvd. E. 100 lbs. 13.75 - —
dms., l.c.l., dlvd. E 100 lbs. 15.25 - —
tanks, dlvd. E 100 lbs. 10.00 - —
USP, tanks, dlvd. E 100 lbs. 13.00 - —
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
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Acetic anhydride prices 1c. higher in West.
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Acetoacet-o-chloroanilide, fib dms., c.l. dlvd lb 1.35 - —
fib dms., l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib dms., c.l., dlvd lb. .82 - —
fib dms., l.c.l. dlvd lb. .83 - —
Acetone, CP, dms., c.l., dlvd lb 10½- —
dms., l.c.l., dlvd lb. 12 - —
tanks, dlvd. lb. .08 - —
Acetonitrile, dms., c.l., frt. alld lb. 34½- —
dms., l.c.l., frt. alld lb. .36 - —
tanks, frt., alld lb. .32 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb dms. 1,000 lbs., frt. alld. lb. 1.22 —
Acetophenone, cns dms lb 42 1.30
Tech., dms., c.l., works ..... lb. .32½- —
dms., l.c.l., works ..... lb. .34 - —
tanks, works ..... lb. .30 - —
N-Acetyl-p-aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1,000-lb. lots, same basis lb. 1.40 - —
dms., 100-lb. lots, same basis ... lb. 1.54 - —
Ace vieron black, imp., bgs., c.l., duty and freight extra lb. .20 —
cs., l.c.l., ex whse lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 —
Acetylsalicylic acid, USP, cryst (20, 40 mesh), powd (80 mesh), 250-lb dms, c.l., pt. at shipt lb. 56¼- —
USP 10% starch granulation, 12-50 mesh, white, 450-lb. dms., c.l., same basis lb. 56¼ —
(Pink and green granulations 5c. per lb higher.) Freight equald. shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis
Acetyltributyl citrate, tech., non-ret dms. c.l., frt alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. 40½- —
tanks, frt. alld. E. of Denver lb. .37 —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb .50 .55
Acrolein, tech., dms., c.l., works lb .36 —
dms., l.c.l., works lb. 36¾ - —
tanks, works lb. .31 —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 —
dms., l.t.l., same basis lb. .60 —
Acrylic acid, glacial, dms., c.l., t.l., dlvd lb. 42½- —
dms., l.c.l., l.t.l., dlvd lb. 43½- —
tanks, dlvd. lb. .40 —
tech., esterification, tanks, frt. all. lb. .38 —
tech., polymerization, tanks, same basis lb. .38 —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld lb. .27 - —
tanks, frt. equald lb .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb. .35 —
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 2.60
dl-Alanine, dms., 100-lbs. or more, f.o.b works lb 5.25 - —
dms. 1-99 lbs., same basis lb.10 00 - —
Aldol, 95%, dms., t.c.l., works lb. .28 - —
Aldrin, tech. fib dms, c.l., t.l. dlvd lb 99 - —
fib dms,. t.c.l. dlvd lb 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c higher W of Rockies

Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 6.55
2½% dms frt alld. ..... lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd..... lb. .32½- —
dms., t.c.l., dlvd..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs. or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4,95... lbs. works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs. works. lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd. lb. .17½- —
dms., t.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif. bitter (see Benzaldehyde)
Almond oil, nat. bitter, f.p.a., bots. lb. 2.75 3.45
NF, bots. ..... lb. 3.00 3.30
sweet, USP, cns., dms..... lb. .60 - .70
Aloe, Cape, cs. ..... lb. 35 - .40
powd cs ..... lb 60 .65
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —

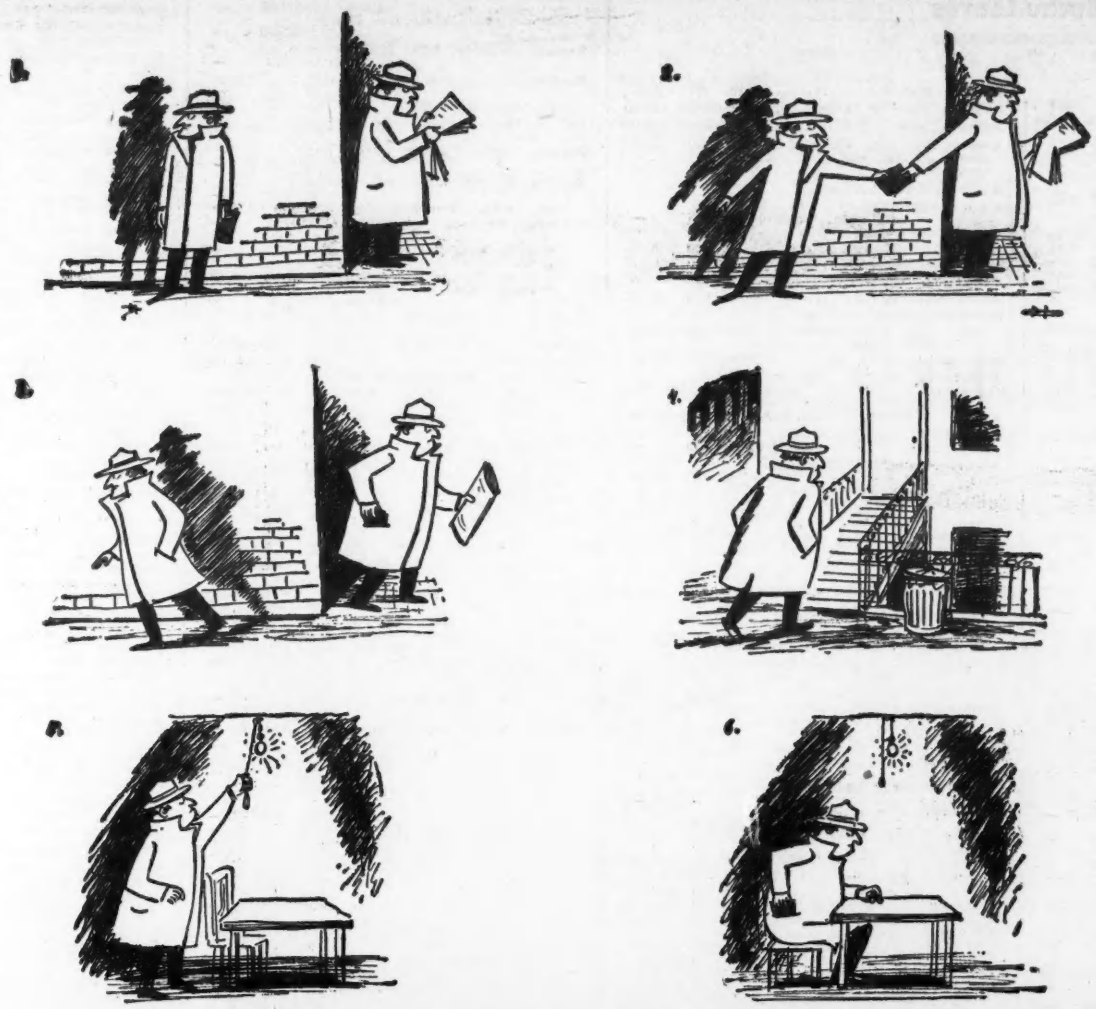
Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
a.p.a.	available phosphoric acid	e.p.	end point	Pac.	Pacific
		equald.	equalized	pf.	proof
approx.	approximately	exp.	expressed	phos.	phosphate
artif	artificial	Ext.	external	photo.	photographic
ASTM	American Society for Testing Materials	F	fahrenheit	pkgs.	packages
		ferment.	fermentation	powd.	powdered
Atl.	Atlantic	f.f.a.	free fatty acid	precip.	precipitated
Be.	Baume	f.f.c.	free from chlorine	prod.	producer
bbls.	barrels	fib.	fiber	pt.	point
bgs.	bags	f.o.b.	free on board	pulv.	pulverized
bls.	bales	f.p.a.	free of prussic acid	purif.	purified
bots.	bottles	frt.	freight	redist.	redistilled
b.p.	boiling point	gal.	gallon	refd.	refined
b.p.l.	bone phosphate of lime	gran.	granular	refy.	refinery
		grd.	ground	reg.	regular.
b.r.	boiling range	i.a.	iron and aluminum	resub.	resublimed
bxs.	boxes			ret.	returnable
C.	centigrade	i.b.p.	initial boiling point	SD	specially denatured
cbys.	carboys	imp.	imported		
CD	completely denatured	incl.	included	s.d.	single distilled
		indust.	industrial	S E.	southeast
c.i.f.	cost, insurance, freight	kgs.	kegs	sec.	secondary
		l-	laevo	secs	seconds
cks.	casks	lacq.	lacquer	s.g.	specific gravity
c.l.	carlots	lb.	pound	shipt.	shipment
cns.	cans	l.c.l.	less carlots	soln.	solution
coml.	commercial	l.t.l.	less truckload	s.u.	standard unit
conc.	concentrated	liq.	liquid	syn.	synthetic
CP	chemically pure	mfrs.	manufacturers	tanks.	railroad tankcars
cps.	centipoises	m-	meta	tech.	technical
cryst.	crystalline	m.a.p.	mixed aniline point	tert-	tertiary
cs	cases			t.l.	truckloads
ctns.	cartons	min.	minimum	t.w.	tankwagons
cyls.	cylinders	m.p.	melting point	USP	U. S. Pharmacopoeia
d-	dextro	N-	nitrogen		
dbl.	double	n-	normal	vis.	viscosity
denat.	denatured	nat.	natural	VM&P	varnish makers & painters
dest-dist.	destructively—distilled	neut	neutral		
		NF	National Formulary	W.	west
dl-	dextro-laevo	NNR	New and Nonofficial Remedies	whse.	warehouse
dist.	distilled			w.w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloin, USP, bbls., dms., kgs. . lb. 2.90 - 3.70
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works 100 lbs. 4.30 - —
Lump, dms., works ..... 100 lbs. 5.05 - —
Powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¼- .08
Alum potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works ..... 100 lbs. 5.30 - —
Powd., dms., works..... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¼- .08
Alum, potash-chrome, dms .... lb. .17 —
Alumina, calcined, bgs., c.l., works. lb. .0535- —
bgs., l.c.l., works..... lb. .056 .0633
Aluminum acetate, basic soln., 24%, bbls. l.c.l. works lb. .14 —
Aluminum chloride coml. anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms. l.c.l. works lb. .16½- —
cryst., dms., c.l. works 100 lbs 21.00 - —
dms., l.c.l., works 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works lb 0495- —
cbys., l.c.l., works lb. 0570- .1093
tanks, works 100 lbs. 3.95 - —
NF, gran., dms., works lb. .31 - .33
Aluminum fluoride tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., t.c.l. works lb. .17¼- .1914
bulk, c.l. basis 80% lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra. t.c.l. works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb. lots, same basis lb. .0395- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0330- —
Light, bgs., c.l., t.l., works ..... lb. .09½- —
bgs., t.l., to c.l., works..... lb. .10½- —
bgs., l.t.l., works ..... lb. .11½- —
Aluminum hydroxide, dried, USP XV fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
8-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb. lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb lots, frt alld. lb. .36 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .71 - —
Standard grade, dms lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c per lb. for 50-lb dm., 3c. per lb. for 10 lb. can and 5c to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 2.15 - 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., t.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., t.c.l., frt. alld..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton.92.00 - —
refrigeration, tanks, works, frt. equald. E. of Rockies ton.94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton.325 - —
dms., ton lots, ex whse. 100 lbs.22.86 - —
dms., smaller lots, ex whse. 100 lbs.24.11 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works..... 100 lbs. 9.50 - —



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New York 17, New York.

SCIENCE FOR THE WORLD'S WELL-BEING Pfizer

Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .3145- .3245
Ammonium bromide, NF, gran., dms., c.l., t.l. frt equald lb. .44 - —
dms. l.c.l., same basis lb. .46 - —
Ammonium carbonate USP lump, dms. c.l lb. .15½- —
Ammonium chloride, white tech., fine gran. bgs. c.l. works, 100 lbs 6.00 —
bgs., l.c.l., works 100 lbs 8.00 8.45
USP, gran., 250-lb. dm. . . . lb. .17¼- —
Ammonium citrate dibasic 250-lb. dm f.o.b works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech. 200-lb. dm f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous)
Ammonium iodide NF, 25-lb. jar, f.o.b. works lb. 4.51 - —
Ammonium lauryl sulfate, dms., c.l., frt alld lb. 20½- —
dms. t.l.l. frt. alld lb .21½- —
tanks frt alld lb. 19½- —
Ammonium lignin sulfonate, bgs., c.l. works 100 lbs 3.25 —
bgs. l.c.l. works 100 lbs 3.40 3.65
Ammonium linoleate, 80%, dms., works lb. .50 .55
Ammonium molybdate, CP, cryst., 400 lb dms. 15,000-lbs works, lb 1.22 - —
400-lb dms. 2,000-lb contracts, works lb 1.23 - —
400-lb dms works lb 1.24 - —
Ammonium nitrate, dom., tertilizer grade 33.5% N bgs f.o.b works ton 67.00 - —
dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton 48.00 - —
Imp. Canadian, 33.5% N eastern, bgs c.l. ship't point frt. equald to $3 ton base price ton 70.00 - —
Ammonium oxalate, tech. fine gran. 250-lb dm. f.o.b works E lb. .28½- —
Tech. powd. 200-lb dm. same basis lb .28½- —
Ammonium pentaborate, gran. bgs., c.l. works ton 193.00 —
bgs., ton lots, ex whse 100 lbs. 15.27 —
bgs. smaller lots, ex store 100 lbs. 16.52 -18.53
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech. dms., 10-ton lots or more, works lb. .18 —
dms. smaller lots, works lb. .20 .23
Ammonium phosphate, comi., bgs., c.l. works, frt. equald lb. .09¼- —
bgs. l.c.l., same basis lb. .10 —
Dibasic, NF V, bbls., dms lb. .46 —
Dibasic, tech. bgs. c.l. works, frt. alld fb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼ .13¼
Ammonium sulfamate bgs. c.l., t.l., works lb. .19 —
bgs. l.c.l. works lb. .20½ .27
Ammonium sulfate, standard granular bulk f.o.b works base price ton 32.00 —
Purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Large granular bulk c.l. works ton 35.00 —
bgs. c.l. works ton 40.00 —
Tech. bulk c.l. t.l., works ton 52.00 —
bgs. c.l. t.l., works ton 56.00 —
bgs. l.c.l. t.l. works 100 lbs 3.20 5.20
Ammonium sulfide liq., 40-44%, tanks frt equald 100% basis, ton 160.00 —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanate tech. cryst. dms. c.l. works lb .20 —
dms l.c.l. works lb. .22 .26
Tech. soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, comi., 55-gal dms., ton lots, 100% basis lb 1.18 —
d-Amphetamine hydrochloride, mono basic dms lb 17.50 -23.50
dl-Amphetamine hydrochloride, di-basic dms lb 4.50 6.00
d-Amphetamine phosphate, fib dms., 100-lb lots lb 15.00 —
dl-Amphetamine phosphate, dms lb 4.20 5.60
d-Amphetamine sulfate, fib dms. lb 15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb 4.20 5.60
Amyl acetate ex fusel oil, tech., dist from 125° to 150°C. dms. c.l., frt alld E. of Rockies lb .18½- .19
dms l.c.l. same basis lb. .20 20½
tanks same basis lb. .16 .16½
ex pentane, reg., dms., c.l., dlvd, lb. .19 - —
dms. c.l. dlvd lb. .21½- —
tanks dlvd lb. .16½- —
Tech., dms., c.l., dlvd lb. .17 - —
dms l.c.l., dlvd lb. .18½- —
tanks dlvd lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. . . lb. .19 - —
dms. c.l. dlvd lb. .20½ —
tanks dlvd lb. .16½ —
Amyl alcohol ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment. refd., 128° 132°C., dms. l.c.l. dlvd lb. .43½- —
refd. ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms. l.c.l. frt. alld lb. .20½- —
tanks frt. alld lb. .16½- —
Primary, dms., c.l., frt. alld. . . lb. .20¼- —
dms. l.c.l. frt alld lb. .21¾- —
tanks, frt alld lb. .17¾- —
Sec-syn-hetic dms. c.l., works, frt alld lb. .19 - —
dms. l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms. c.l. frt. alld E lb. .17 - —
dms. l.c.l. frt. alld E lb. .18½- —
tanks frt alld E lb. .14½- —
Amyl alcohol 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms. l.c.l. works lb. .43 —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms. l.c.l. works lb. .70 - —
tanks works lb .60 - —
Amyl n-butyrate dms. lb 1.00 1.20
Amyl cinnamic aldehyde dms lb 1.70 2.30
p-tert Amyl phenol dms. c.l. works, lb. .28 - —
dms., l.c.l., works lb. .29 - —
Amyl salicylate, cns. dms. . . . lb .71 —
Amyris oil, dms lb 1.50 —
Anethol, tech., dms. . . . lb .80 .82
USP, cns., dms lb 1.05 —
Angelica root, bls. . . . lb. .50 - 1.00
Angelica root oil, bots. . . . lb. 120.00 -140.00
Angelica seed oil, bots. . . . lb. 120.00 -130.00
Aniline dms., c.l., frt. alld. . . . lb. .20 - —
dms., l.c.l., frt. alld. . . . lb. .21 - —
tanks, frt. alld. . . . lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l. t.l., 20,000 lbs. min., frt. alld lb. .33 - —
dms., l.c.l., same basis . . . lb. .35 - —
Anise oil, USP, dms . . . lb. 1.90 - 3.00
Anise seed, Turkish, bgs. . . . lb. .24 - —
Spanish, bgs. . . . lb. .32 - —
Anisic aldehyde, dms . . . lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis . . . lb. .82 - —
tanks, same basis . . . lb. .78 - —
p-Anisidine, dms., works . . . lb. .97 - —
Anthracene, 80-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms. l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bgs., c.l., frt. alld lb. .70 - —
bbls., l.c.l., same basis lb. .73 - —
Electrical grade, bgs. l.c.l., same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines, lb. .32½- —
cs., c.l., mines . . . lb. .33 - —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- .30
bgs., l.c.l., frt. alld. . . . lb. .28 - .31½
Prices of antimony oxide are 2c. higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 —
bgs., smaller lots, dlvd lb. .24 .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz. 35.60 —
Apricot kernel oil, USP, dms lb. .55 .70
Arabic gum, amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls . . . lb. .27 - .30
Areca nuts, powd., bbls . . . lb. .18 - .20
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
1-Arginine, free base, dms., 10-kilo lots or more kilo. 90.00 - —
1-Arginine glutamate, dms., 10-kilo lots or more kilo. 64.80 - —
1-Arginine monohydrochloride, dms., 10-kilo lots or more kilo. 60.00 - —
Arnica flowers (true Montana), bls. lb .75 —
Aromatic petroleum solvents (see Solvent Naphtha petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 —
bbls., c.l., works lb. .0.31 —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l. works lb .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Aryltd maroons, deep shades, bbls. lb 3.70 —
Light shades, bbls. . . . lb 2.85 —
Asafetida gum, cns . . . lb. .36 - .40
Powd. bbls. dms lb .75 .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton. 80.00 - —
7D, c.l. (30 tons), mines ton. 75.00 - —
7F, c.l. (30 tons), mines ton. 71.00 - —
7H, c.l. (30 tons), mines ton. 61.00 - —
7K, c.l. (30 tons), mines ton. 50.00 - —
7M, c.l. (30 tons), mines ton. 44.00 - —
7R, c.l. (30 tons), mines ton. 43.00 - —
7RF c.l. (30 tons), mines ton. 44.00 - —
7T, c.l. (30 tons), mines ton. 41.00 - —
7TF c.l. (30 tons) mines ton. 44.00 - —
Asbestos prices are in Canadian funds; t.c.l lots $4 per ton higher
Ascorbic acid, USP, dms, 100-kilos kilo. 6.35 - —
dms., less than 100-kilos, . . kilo. 6.00 - —
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton. 43.00 - —
ex-whse, 5 tons or more, N. Y., N. J ton. 89.50 - —
select, brilliant black, 340°-360°F fusing pt., bgs., c.l., mines, ton. 46.00 - —
370°-395°F fusing pt., bgs., c.l., mines ton. 43.00 - —
Petroleum, cut-back, tanks, tank-wagon, refy gal. .09½- —
emulsion, tanks, tankwagon refy gal. 09½ —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton. 21.00 - —
85-300 penetration, tanks, tank-wagon, refy ton. 30.00 - —
Aspirin (see Acetylsalicylic Acid)
Atropine, NF, tins . . . oz. Nom.
Atropine sulfate, USP, bots, 10 oz. lots oz. 5.25 - —
Azelaic acid, bgs., c.l. dlvd. . . . lb. .40 —
bgs. ton lots same basis . . . lb. .41 —

B

Bacitracin, sterile, over 500,000,000 units 50,000 units. .90 - —
non-sterile, over 500,000,000 units, 50,000 units. .65 - —
Balm of Gilead buds, dried, bgs lb 1.25 1.35
Barberry root bark, bgs lb 1.00 1.10
Barbital, NF 100-lb dms., f.o.b. works lb 4.50 —
Barbital sodium, NF, 100-lb dms. lb 4.75 —
Barium carbonate, precip., bgs. c.l., works ton. 111.50 —
bgs. smaller lots, works ton. 126.50 —
Barium chlorate, dms. works lb .39 .41
Barium chloride anhyd., bgs. c.l., works ton. 176.00 —
bgs., l.c.l., works ton. 196.00 —
NF, cryst., dms., 400-lbs., works lb .23 - —
Tech. cryst., bgs. c.l., works, 100 lbs. 7.00 - —
bgs. l.c.l. works 100 lbs 8.00 - —
Barium chromate, bgs. frt. equald. lb .38 - —
Barium dioxide (see Barium peroxide)
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton. 208.00 —
bgs., l.c.l., t.l. frt equald ton. 218.00 —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs. 11.25 - —
bgs. l.c.l., frt. equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide)
Barium nitrate, bbls. c.l., t.l. dlvd lb .16 - —
bbls., l.c.l., t.l.l., dlvd. lb .17 —
Barium oxide, grd., dms., c.l., t.l., frt equald ton. 275.00 - —
dms. l.c.l., t.l., frt. equald ton. 285.00 - —
Barium peroxide, dms. frt. equald, lb .20 —
Barium stearate, ctns. c.l., frt. alld, lb. .41 - —
ctns., l.c.l., same basis . . . lb. .43 .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19 - —
Barium sulfide, dms., c.l., works, ton. 100.00 —
dms., l.c.l., works . . . ton. 110.00 —
Barytes, southern off-color, bgs. mines ton. 31.00 - —
95-75%, bgs., mines ton. 30.00 - —
white, water-grd paper bgs. c.l. St. Louis ton. 60.00 -60.25
paper bgs. ex whse New York ton. 84.85 —
Battery acid, chys., c.l., works E. 100 lbs 2.35 —
chys, l.c.l., works, E 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ton. 7.00 -10.00
Bay oil NF Puerto Rican 50-55% cns. lb. 4.00 - —
55-60%, cns. . . . lb. 4.00 - —
NF, West Indian, 50-55%, cns. dms. lb. 4.25 - 4.50
Bayberry wax, bgs lb. .65 - .70
Beeswax, crude, African, bgs. . lb. .52 - .54
Brazilian, bgs. . . . lb. .56 - .57
Central American, bgs. . . . lb. .56 - .57
Chilean, bgs. . . . lb. .57 Nom.
Refd. USP bleached white, bricks 100-lb ctns lb. .67 - .69
white, slabs, 100-lb. ctns lb. .66 - .68
yellow, bricks, 100-lb ctns lb .59 - .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls. . . . lb. .24 - .26
Belladonna root, bls . . . lb. .35 - .38
Bentonite, dom 200 mesh, bgs., c.l., mines ton. 14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton. 95.20 - —
bgs., 1-ton lots, ex whse ton. 99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton. 93.40 - —
bgs., 1-ton lots ex whse ton. 97.16 - —
Benzal chloride, chys., works lb. .44 - —
Benzaldehyde, NF, dms. . . . lb. .74 - —
Tech., dms., c.l., t.l. . . . lb. .42 - —
dms., l.c.l. . . . lb. .44 - —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La . . . gal. .34 - —
Bethlehem, Pa . . . gal. .34 - —
Birmingham district . . gal. .34 - —
Chicago district . . . gal. .34 - —
Cleveland district . . . gal. .34 - —
Geneva, Utah . . . gal. .34 - —
Houston, Tex. . . . gal. .34 - —
Johnstown, Pa. . . . gal. .34 - —
Lorain, Ohio . . . gal. .34 - —
Middletown, Ohio . . . gal. .34 - —
Mennequa, Colo. . . . gal. .34 - —
Philadelphia district . gal. .34 - —
Pittsburgh district . gal. .34 - —
Port Arthur, Tex. . gal. .34 - —
St. Louis, Mo. District gal. .34 - —
Sparrows Point, Md. . gal. .34 - —
Syracuse, N. Y. . . . gal. .34 - —
Terre Haute, Ind. . . . gal. .34 - —
Youngstown, Ohio . . . gal. .34 - —
Lackawanna, N. Y. . . gal. .34 - —
Lone Star, Tex . . . gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit, .0075 —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech. low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit, .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. . . . lb. 2.55 - —
Lightfast, bbls., dlvd. . . . lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 - .37
dms., l.t.l., same basis . . . lb. .29 - .41
tanks, same basis . . . lb. .21 - —
USP, bbls., dms., ton lots lb. .46 - —
bbls., dms., 1,000-lb lots lb. .50 —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. . . . lb. .32 —
Benzophenone, dms lb. 1.35 - 1.40
Benzotriazole, tech dms., 1,000-lb. lots, works lb. 1.95 - —
Benzotrichloride, chys., 5,000-lb. lots or more, frt equald. lb. .21 - —
chys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, chys. dms., c.l., works, frt. equald lb. .22 - —
chys., l.c.l., same basis lb. .23 - —
tanktrucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots works lb. .98 1.08
Benzyl acetate, t.f.c. cns. dms lb. .54 - —
Benzyl alcohol, NF, dms. . . . lb. .54 - —
Tech. dms. dlvd . . . lb. .47½- .65
Benzyl benzoate, USP, 40-lb dms. lb. .62 - —
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald lb. .23 - —
dms., l.c.l., same basis . . . lb. .24 - —
tanktrucks, dlvd., Metropolitan area lb. .21 - —
Benzyl cinnamate, cns . . . lb. 3.80 - 4.00
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 - —
12-49 dms. same basis . . . lb. 1.35 - —
1-11 dms., same basis . . . lb. 1.90 - —
Benzyl formate, cns. . . . lb. 1.70 - 1.85
Benzyl isoeugenol, cns . . . lb. 8.20 - 8.30
Benzyl propionate, bots . . . lb. 1.30 - 1.35
Benzyl salicylate, bots . . . lb. 1.50 - 1.85
Benzylidine acetone, bots . . . lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns . . . lb. 56.50 - —
Berberine hydrochloride, bots . . . lb. 56.50 - —
Bergamot oil nat. NF Italian, cns. lb. 11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethinaphthalene (see Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine)
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine)
Bibl (see Benzene hexachloride, tech.).
Biotin, cryst., bots . . . gram. 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns . . . lb. 1.50 1.90
Rectified, cns . . . lb. 1.75 2.00
Bismuth chloride, bars . . . lb. 5.11 —
Bismuth hydroxide, dms . . . lb 4.60 4.65
Bismuth metal, bxs. ton lots . . . lb. 2.25 - —
Bismuth nitrate, cryst., 200-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.92 - —
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works lb. 3.70 - —
Bismuth subgallate, NF, 200-lb dm. f.o.b. works lb 3.98 - —
Bismuth subiodide, fib dms lb 5.37 - —
Bismuth subnitrate, NF, 200-lb dm., f.o.b., works lb. 3.10 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.15 - —
Bismuth trioxide, 100-lb. dms., f.o.b works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt. 70,000-lbs or more, frt. alld lb. .30½- —
bgs., c.l., t.l., less than 70,000-lbs., same basis lb. .31 - —
bgs., l.c.l., same basis lb. .32½- —
Blackberry root bark, bls lb. 50 .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black

Blanc fixe, direct process, bgs. c.l., works ton. 180.00 —
bgs., t.c.l., works ton. 170.00 - —
bgs., l.c.l., New York whse ton. 215.00 - —
Blood, dried 16-16½% ammonia, bgs., New York unit-ton 5.50 —
Bloodroot, bls. lb 85 .90

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb. 2.05 - —
Peruvian, dms. lb. 1.65 - —
BON acid, maroons, pure, bbls lb 1.75 —
Resinated, bbls lb 1.50 —
Bone black, dms. c.l., frt. alld lb .1750- .2225
l.c.l. works lb. .1950- .2425
Pacific coast bone black prices 3¼c. per lb higher
Bonemeal, steamed, works, E ton. 100.00 - —
Bone phosphate, defluorinated, or lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate, tribasic)
Borax, tech. anhyd., 99½%, bgs., c.l. works ton 92.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 7.67 - —
Borax, tech., anhyd., 99½%, bgs., smaller lots, same basis, 100 lbs. 8.91 -10.91
bulk c.l. works ton 83.00 —
Tech., gran., decanydrate, 99½%, bgs., c.l., works ton. 50.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 5.31 - —
bgs smaller lots same basis 100 lbs. 6.56 - 8.56
bulk c.l. works ton 43.50 —
Tech., pentahydrate, 99½%, bgs., c.l., works ton. 64.50 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 6.12 - —
bgs smaller lots same basis 100 lbs. 7.37 - 9.37
bulk, c.l., works ton. 58.00 —
USP powd., bgs c.l. works ton. 54.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 6.57 - —
bgs. smaller lots same basis. 100 lbs. 7.82 - 9.82
Bordeaux powder tribasic bgs. c.l. dlvd lb. .24 - —
bgs. l.c.l., same basis lb. .26 - —
Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton. 335.00 - —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 21.27 - —
bgs. smaller lots same basis 100 lbs. 22.52 -24.53
cryst. 99.9% bgs. c.l. works, ton. 163.50 —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 11.67 - —
bgs. smaller lots, same basis, 100 lbs. 12.92 -14.93
dms., c.l., works ton. 185.50 —
dms., ton lots, ex whse., New York or Chicago 100 lbs. 13.17 - —
dms., smaller lots, same basis 100 lbs. 14.42 - —
gran., 99.9%, bgs., c.l., works, ton. 112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.78 - —
bgs. smaller lots same basis 100 lbs. 10.03 -12.03
dms. c.l. works ton. 137.00 —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 10.29 - —
dms. smaller lots same 100 lbs. 11.54 - —
bulk, c.l., works ton. 106.00 - —
powd., bgs., ton lots, ex whse, New York or Chicago 100 lbs. 9.20 - —
bgs., smaller lots, same basis 100 lbs. 10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs. 10.71 - —
dms., smaller lots, same basis 100 lbs. 11.96 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb cyls. works lb. 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb. .70 - —
cyls., l.t.l. works . . . lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. . . . lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 5-gal. cby., frt. equald lb. 1.95 - —
Bromstyrol, bots lb. 5.25 5.35
Brucine, cns. . . . oz. 1.10 - —
Brucine sulfate, NF, cns. . . . oz. .85 - —
Buchu leaves, bbls. . . . lb. .60 - .65

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy	lb.	.21	—
cyls., l.c.l., refy.	lb.	.22	—
tanks, dlvd.	lb.	.12¾-	—
Butene-1, tanks, works	lb.	.0625-	—
Butene-2, tanks, works	lb.	.0570-	—
n-Butyl acetate, ferment, dms., c.l., frt. alld.	lb.	.17	—
dms., l.c.l., same basis	lb.	.18½	—
tanks, same basis	lb.	.14½	—
Syn., dms., c.l., dlvd. E.	lb.	.17	—
dms., l.c.l., same basis	lb.	.18½	—
tanks, same basis	lb.	.14½	—
sec-Butyl acetate, syn., dms., c.l., dlvd. E.	lb.	.14¾	—
dms., l.c.l., same basis	lb.	.16¼	—
tanks, same basis	lb.	.12¼	—
n-Butyl acryiate, dms., c.l. or t.l., straight or mixed frt. alld. E.	lb.	.37½	—
dms., l.t.l., same basis	lb.	.38½	—
tanks, same basis	lb.	.35	—
n-Butyl alcohol, ferment, dms., c.l., frt. alld.	lb.	.18	—
dms., l.c.l., frt. alld.	lb.	.19½	—
tanks, frt. alld.	lb.	.15½	—
Syn., dms., c.l., dlvd. E	lb.	.17	—
dms., l.c.l., frt. alld.	lb.	.19½	—
tanks, frt. alld.	lb.	.15½	—
Sec-synthetic, dms., c.l., dlvd.	lb.	.15	—
dms., l.c.l., dlvd.	lb.	.16½	—
tanks, dlvd.	lb.	.12½	—
Tert-synthetic, dms., c.l., frt. alld., dlvd. E.	lb.	.16	—
dms., l.c.l., same basis	lb.	.17½	—
tanks, same basis	lb.	.13½	—
Butyl aldehyde (see Butyraldehyde).			
Butyl chloride, dms., c.l., works	lb.	.37½	—
dms., l.c.l., works	lb.	.38¼	—
n-Butyl ether, dms., c.l., works	lb.	.35½	—
dms., l.c.l., works	lb.	.36	—
tanks, works	lb.	.33¼	—
Butyl lactate, dms., c.l., frt. alld. E. Rockies	lb.	.42¼	—
dms., l.c.l., same basis	lb.	.43½	—
tanks, same basis	lb.	.40	—
Butyl laurate, dms., works	lb.	.37½	—
Butyl methacrylate, dms., c.l., t.l., works	lb.	.55	—
dms., l.c.l., works	lb.	.55½	—
Butyl oleate, refd., dms., l.c.l., works	lb.	.32	—
Butyl phenylacetate, dms.	lb.	4.50	4.60
Butyl phthalate (see Dibutyl phthalate).			
Butyl stearate, CP, dms., l.c.l., frt. alld. E. of Rockies	lb.	.27¼	.28½
tech., dms., c.l., same basis	lb.	.25¾	—
Butylamine (see Mono-, Di- and Tri-butylamine).			
tert-Butylamine, dms., c.l., t.l., f.o.b. works	lb.	.47	—
dms., l.c.l., same basis	lb.	.47½	—
tc., t.t., same basis	lb.	.45	—
Butylated hydroxyanisole, food grade, dms., dlvd.	lb.	4.75	—
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol)			
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).			
1,3-Butylene glycol, dms. c.l., t.l., dlvd	lb.	.20½	—
dms., t.c.l., t.t.l., f.o.b. works	lb.	.22	—
tanks, dlvd	lb.	.18	—
p-tert-Butylphenol, bgs., c.l., frt. alld.	lb.	.25½	—
bgs., l.c.l., same basis	lb.	.26½	—
tanks, same basis	lb.	.23½	—
Butyraldehyde, dms., c.l., dlvd	lb.	.22	—
dms., l.c.l., dlvd.	lb.	.23½	—
tanks, dlvd.	lb.	.19½	—
Butyric acid, 99%, dms., c.l., frt. equald.	lb.	.34	—
dms., t.c.l., same basis	lb.	.34½	—
tanks, same basis	lb.	.32½	—
Butyric ether (see Ethyl butyrate).			
Butyrolactone, dms., c.l., t.l., works	lb.	.40	—
dms., l.c.l., same basis	lb.	.43	—
n-Butyronitrile, dms., c.l., dlvd.	lb.	.36½	—
dms., l.c.l., dlvd.	lb.	.37½	—
tanks, dlvd.	lb.	.34	—

C

Cacao butter (see Cocoa butter).			
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies	lb.	5.55	—
Light shade, bbls., same basis	lb.	4.65	—
Medium shade, bbls., same basis,	lb.	5.30	—
Medium, light shade, bbls., same basis,	lb.	4.90	—
Orange-red shade, bbls., same basis	lb.	4.30	—
Yellow, all shades, bbls., frt. alld. E. of Rockies	lb.	3.02	—
Cadmium chloride, 400-lb. dms., f.o.b. shipping point	lb.	1.56½	—
Cadmium iodide, 25-lb fib. dms	lb.	6.75	7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd	lb.	1.60	—
Cadmium nitrate, purif. cryst., 400-lb. dms., less than 5,000 lbs., f.o.b. shipping point.	lb.	.94	—
400-lb. dms., 5,000 lbs. or more, same basis	lb.	.90	—
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies	lb.	1.73	—
Cadmium-mercury lithopone red, dark shade, bbls., same Basis	lb.	2.03	—
Red, light shade, bbls., same basis	lb.	1.80	—
Red, medium shade, bbls., same basis	lb.	1.95	—
Red, medium light shade, bbl same basis	lb.	1.88	—
Red, maroon shade, bbls same basis	lb.	2.11	—
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies	lb.	2.84	—
Orange, bbls., same basis	lb.	1.66	—
Cadmium-selenide lithopone red, orange-red shade bbls. same basis	lb.	1.80	—
Red, dark shade, bbls., same basis	lb.	2.64	—
Red, light shade, bbls., same basis	lb.	1.96	—
Red, medium shade, bbls., same basis	lb.	2.31	—
Red, medium-light shade, bbl same basis	lb.	2.08	—
Cadmium-selenide, lithopone, yellow, all shades bbls., frt alld E. of Rockies	lb.	1.27	—
Caffeine, NF, citrated, dms. 100-lb. lots or more	lb	2.70	—
USP, syn., cryst., hydrous, dms., 100-lb. lots or more, frt. alld	lb.	2.25	—
hydrous, powd., 150-lb. dms., frt. alld	lb.	2.25	—

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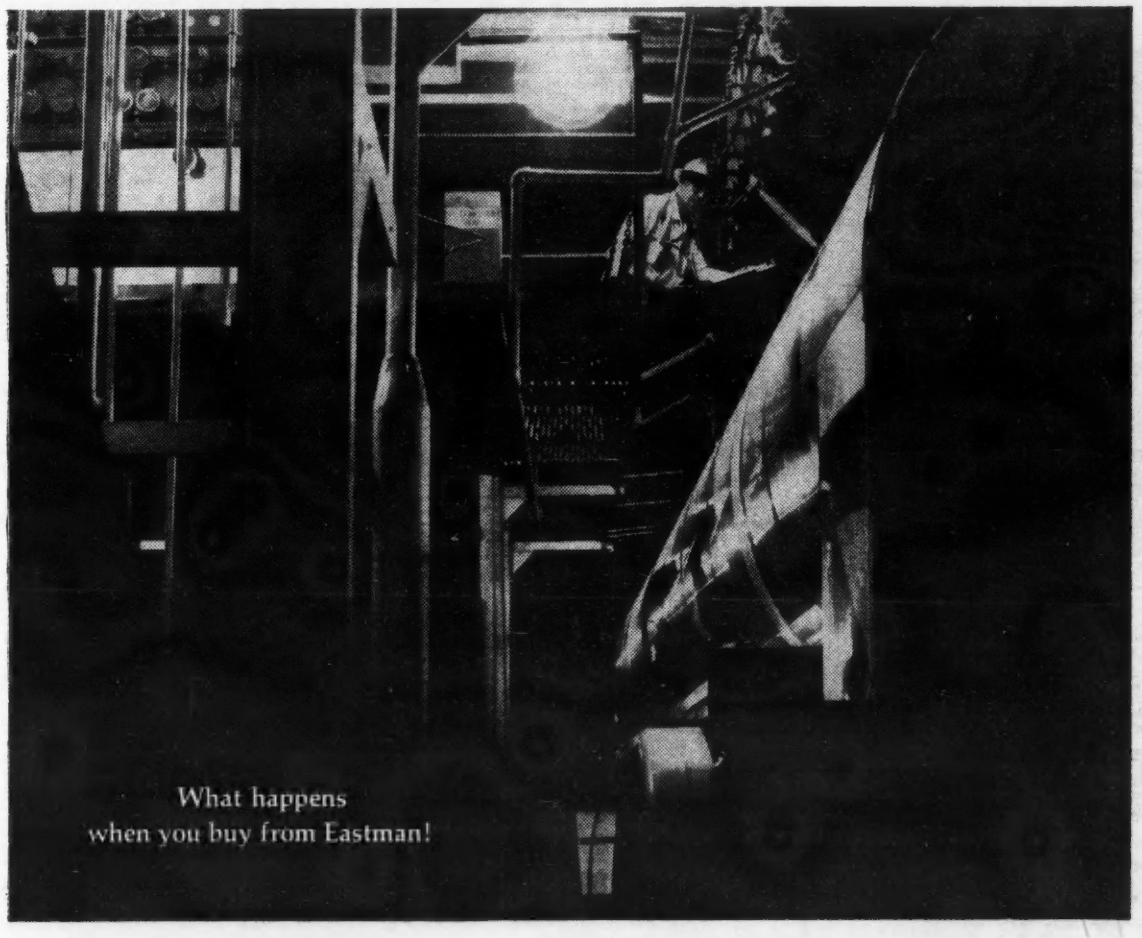
Eastman Raw Materials for the Pharmaceutical Industry

acetaldehyde
acetanilide
acetic acid
acetic anhydride
acetone
benzoquinone
ethyl acetate
ethyl alcohol
isobutyl acetate
isobutyl alcohol
isobutyraldehyde
isopropyl acetate
Tenox® antioxidants
oxidized cellulose

For properties and shipping information on these and other Eastman products, see Chemical Materials Catalog, page 163, or Chemical Week Buyers' Guide, page 107.



"The customer was wrong...but we were right on time"

...recalls production supervisor, Acid Division

"It started with a phone call from one of our regional sales managers asking about a tank car of acetic anhydride that hadn't arrived at the customer's plant.

"Seems they were in full production on their line of antibacterial drugs. Anhydride supplies were running low and the purchasing agent was getting pretty uneasy.

"Well, we turned to the files to see what had happened, but we couldn't find the order. So we searched again and then we re-searched. Found an old office procedure we never knew we had—but not a trace of the order.

"Our sales office called the purchasing agent back and with considerable embarrassment told him we had looked high and low but simply couldn't find any record of the order. The purchasing agent comes back with—'Of course you couldn't find the order. One of our *ex*-employees forgot to mail it. It's still here in the office.'

"Then he told us their production units would have to shut down if they didn't get delivery by 8:00 A.M. on the second morning. Could we help them out.

"By this time the day was well along and our loading crew had already gone to dinner. We located two tank trucks in a hurry and recalled the crew who loaded the anhydride (that's me leaning on the clipboard) and had sample analyses run immediately. With the help of our friends over at the Mason-Dixon truck terminal the shipment went out that night.

"The trucks had sleeper cabs and two drivers. Driving night and day, they covered the run of more than 800 miles in time to arrive at the customer's receiving platform the next night—well in advance of our customer's deadline."

A typical delivery? No! But typical of the interested personal service you can always expect when you buy from Eastman.

Eastman CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee, Atlanta, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Greensboro, North Carolina, Houston, Kansas City, Missouri, New York City, Philadelphia, St. Louis.
West Coast: Wilson & Geo. Meyer & Company, San Francisco, Los Angeles, Portland, Salt Lake City, Seattle

Caffeine, USP, syn., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld lb. 2.40 - —
Cajuput oil, native ens. lb 1.75 2.00
Redist. USP ens lb 1.90 2.10
Calamine USP dms. lb .34 —
Calamus oil bots lb 12.00 -30.00
Calciferol cryst. 10-kilo or more lots, works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Vitamin D).
Calcium p-aminosalicylate trihydrate fib dms. 100 lbs. or more frt adjusted lb 3.10 - —
Calcium bromide NF bars 100 lbs. or more lb 1.10 - —
Calcium carbide standard generator size, 600 lb dms. c.l., divd ton. 149.00 - —
Calcium carbonate, nat., dry grd., air floated, 325 mesh, bgs. c.l. works ton 10.50 —
Chalk, whiting, 325 mesh, bgs., c.l., works ton. 32.00 -34.00
water grd ½ to 10 microns bgs c.l. works ton. 30.00 —
10 to 50 microns bgs. c.l. works ton 17.00 -18.00
Precip., dense, bgs., c.l., works, ton. 30.00 -38.50
ngs. c.l., works ton 45.00 53.50
medium bgs c.l. works ton 38.00 —
bgs. c.l. works ton 48.00 -53.00
Surface treated, bgs., c.l., works, ton. 42.00 -44.00
bgs., c.l., works ton 57.00 59.00
ultrafine bgs c.l. works ton 117.50 167.50
bgs c.l. works ton 137.50 187.50
Calcium chloride, conc flake or pellet 94-97% paper bgs., c.l works frt equald ton. 39.30 - —
Flake, 77-80% paper bgs., c.l., works frt equald ton 32.00 - —
Liquor 40% tanks frt equald ton. 12.50 - —
Calcium chloride, powd., 77% min., paper bgs., c.l., works, frt. equa... ton. 38.00 - —
Purif. gran. dms lb .27 —
Calcium chloride solid, 73-75%, dms., c.l., frt. equald ton. 30.50 - —
dms. l.c.l. works frt. equald. ton. 36.00 -73.00
USP gran. dms. lb .33 —
Calcium chromate, bgs., dlvd lb .37 - —
Calcium cyclamate 100-lb dms lb 1.90 - —
Calcium gluconate, USP, A.A. grade, 100-lb dm. ton lb. 73½- —
USP powd 100-lb dm ton lb. 68½- —
Calcium hydride lump dms. works, lb 2.20 3.00
Calcium hypochlorite, high test, gran 45-lb cs. dlvd E of Rockies cs. 27.50 - —
100-lb. dms., same basis dm. 29.50 - —
Calcium hypophosphite cms. 1,000-lb lots lb 1.28 - —
Calcium iodide, 25-lb. jars, works lb. 4.27 - —
Calcium lactate NF dms., l.c.l. works lb. .43 .48
Calcium mandelate USP 150-lb. dm., works lb 3.25 - —
Calcium naphthenate, liq. 4% Ca., dms. frt equald lb .30 - —
Calcium pantothenate, USP jars, 1 kiln or more kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate)
Calcium phenosulfonate dms lb 1.24 1.25
Calcium phosphate dibasic, USP, dihydrate, bgs., c.l., frt. equald 100 lbs. 8.25 - —
Calcium phosphate, dibasic, feed grade, 18½% P, bgs., c.l. t.l., Bonnie, Fla. frt. equald ton. 81.00 - —
bgs. c.l. t.l., f.o.b. Texas City works ton 75.50 - —
bgs., l.c.l. ton. 91.00 - —
Feed grade, 21% P., bgs., c.l., t.l. frt equald ton. 97.65 - —
bgs. l.c.l. frt equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs. c.l. prices.
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.45 - —
bgs., smaller lots same basis, 100 lbs. 7.95 - —
Tribasic, NF, precip. bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs. l.c.l. frt. equald 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms., dlvd E of Rockies. lb. .37 - —
Prices W. of Rockies 3c. per lb. more.
Calcium phytate bgs., 50 lbs. or more f.o.b. warehouse N.Y. lb. .39 - —
Calcium resinate, precip., dms., frt. alld., works lb. .42 - —
Calcium silicate hydrated, ngs., c.l., works lb. .08 - —
bgs. l.c.l., works lb. .08½- —
Calcium silicate paint grade (see Wollastonite)
Calcium stearate, ctns. c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calomel NF mild, powd. dms., 100-lbs., f.o.b. works lb 4.32 - —
NF mild, precip., dms., 100-lbs., f.o.b. works lb 5.67 - —
Camphene 45° m.p. dms incl., c.l., works lb. .15 - —
dms. incl., l.c.l. same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene chlorinated 67-69% (see Toxaphene)
Camphor, monobrominated, NF, dms., bgs lb. 3.63 3.70
Camphor, syn. tech. 1 bbl or more, lb. .45 - —
USP, gran., powd. bbls., 1,000-lb lots lb. .53 - —
bbls smaller lots lb. .54 - —
tablets, ctns., 1,000-lb. lots, lb. .80 - —
ctns., 500-lb. lots lb .81 - —
ctns., smaller lots lb .83 - —
Camphor oil, sassafrassy dms. lb. .35 - .55
White, dms lb .26 .50
Cananga oil native, ens. lb 5.00 6.50
Rectified, ens lb 7.25 -10.00
Candelilla wax, crude, bgs lb. .57 - .58
Refd., pure, bgs lb. .62 - .63
Powdered Candelilla wax 20 to 100 mesh 3c higher.
Cantharides, Chinese, cs. lb 1.00 - —
powd. bgs lb 1.15 - —
Russian bgs. lb 2.00 2.15
powd. bgs lb 2.15 3.30
Capric acid, dms lb. .27½- .29½
tanks lb. .24½- —
Caprolactam, monomer, bgs., c.l., t.l. f.o.b. works lb .32 - —
bgs. l.c.l., t.l.l. same basis lb .37 - —
tanks, same basis lb. .40 - —

Capryl alcohol, 85% dms., c.l., t.l., works lb. .19 - —
dms., t.l.l., same basis lb. .19½- —
tanks, frt. equald. lb. .16½- —
Sec. 93-99% dms., c.l., f.o.b. works lb. .22 - —
dms. l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b works lb. .19½- —
Caprylic acid, dms lb. .27½- .29¾
tanks lb. .24¾- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb 4.00 - —
NF, from African pepper, dms. lb 4.50 —
Caraway oil, NF, dms lb. 4.25 - 4.50
Caraway seed Danish, bgs. lb .16 —
Dutch, bgs. lb. .15½- —
Carbazole, 97%, bbls, ton lots, works lb 1.05 —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works lb. .08½- —
bgs., l.c.l., works lb. .16¼- —
furnace, fast extruding, bgs., c.l., works lb. .08¾- —
ctns, l.c.l., whse lb. .13½- —
high abrasion, bulk, c.l., works, lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works lb. .08¼- —
ctns., l.c.l., whse lb. .13 - —
semi-reinforcing, bgs., c.l., works, lb. .05¾- —
bgs., ctns., l.c.l., whse lb. .12½- —
pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .23½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton. 80.00 -115.00
bulk, 3,000,000 lbs or more, dlvd Metropolitan areas, E ton. 55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —
Carbon disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .071 —
55-gal. dms. l.c.l., same basis lb. .086 .091
5-gal dms., 30 dms to c.l., same basis lb. .131 —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, f.o.b. works lb. .0450- —
Carbon tetrachloride, CP, consumers dms. c.l., frt. alld. lb. .12¾- —
dms. l.c.l. frt alld. lb. .15¼- —
Tech. consumers dms. c.l., t.l., frt. alld lb. .11¾- —
dms. l.c.l. t.l.l. frt. alld lb. .14¼- —
tanks, frt / alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb 4.00 4.25
dms. smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots lb. 40.00 -43.00
Cardamom seed, bleached "A" lb. 3.25 - —
Bleached "B" lb. 3.05 - —
Decorticated Alleppey, cs. lb. 2.55 - —
Guatemala, cs. lb. 1.95 - —
Green, Alleppey, bgs lb. 1.90 - —
Ceylon, bgs. lb. 2.10 - —
Carmine No. 40, NF, bulk, 100-lb lots or more divd. lb 16.80 —
bulk, smaller lots, divd. lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots, lb. .66 - —
North Country, No. 2, crude, bgs., ton lots lb. .73 Nom.
refd., pure, ton lots lb. .76 - .77
North Country, No. 3, Ceara, crude, ton lots lb. .58 - .60
North Country, No. 3, Parnahyba, crude, ton lots lb. .60 - .62
No. 3, refd., pure, bgs., ton lots, lb. .66 - .68
No. 1, Ceara, yellow, bgs., ton lots, lb. .82 - .83
Parnahyba, yellow, bgs., ton lots, lb. .85 - .86
Powdered carnauba wax, 20 to 100 mesh 3c higher lb higher
Carotene tech. 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units .12 - —
USP microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .140 - —
b-Carotene in vegetable oil, semi-solid suspension 400,000 A units per gram cns kilo. 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns kilo. 240.00 —
Carvol, bots lb 3.00 3.40
Cascara sagrada bark, bulk lb. .32 —
Casein, dom. edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .50 - —
Casein, dom., edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .54 - —
Imp., inedible acid-precip., gre., Argentine, bgs. c.l., ex-dock Eastern seaports lb. .18¾- .19
Australian, bgs. c.l. same basis lb. .20 - —
New Zealand same basis lb. .24 .26
Cashewnut shell liquid, treated, dms. c.l., Newark, N.J. lb. .24 - —
dms. ton lots same basis lb. .25 - —
t.w., same basis lb. .22½- —
Cassella acid, dms. frt. alld., 100% basis lb 1.44 1.75
Cassia oil, redist., USP, ens. lb. 6.50 - 8.00
Cassia, Padang, "A," bls. lb. .31 —
"B," bls. lb. .30 - —
"C," bls. lb. .29 - —
Korintje "A," bls. lb. .31 - —
"B," bls. lb. .28 - —
"C," bls. lb. .27 - —
Castor oil, dom., blown, dms., c.l., lb. .2650- —
dms. l.c.l. lb. .2650 —
dehydrated, bodied, dms., c.l. lb. .2700- —
dms. l.c.l. lb. .2850- —
tanks lb. .2500- —
dehydrated, unbodied, dms., c.l., lb. .2500- —
dms., l.c.l. lb. .2650 —
tanks lb. .2360- —
hydrogenated, bgs., c.l. lb. .2475- —
bgs., ton lots lb. .2375- —
bgs., l.c.l., dlvd lb. .2675- —
raw, No. 1, dms., c.l. lb. .2700- —
dms., l.c.l. lb. .2850- —
tanks lb. .2500- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., c.l., lb. .2275- —
tanks lb. .1925- —

Castor oil, refd., deod., dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
USP, dms., c.l. lb. .2350- —
dms., l.c.l lb. .2450- —
tanks lb. .2150- —
Imported, No. 1, Braz., tanks lb. .17¾- —
No. 3, tanks, same basis lb. .17¼- —
Sulfonated, 50%, dms., works lb. .15 - .15½
75%, dms. works lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .41¼- .43¼
Split, dms. lb. .33¾- .34¾
Castor pomace, bgs., c.l., works ton. 35.00 - —
Castoreum nat., ens. lb. 5.25 - —
Syn., ens lb. 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½- —
Resub., dms. works lb. 4.29½ —
Catnip leaves, Southern, bls lb. Nominal.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII ens., dms. lb. 4.00 - 5.00
Cedarwood oil, ens., dms lb. 1.15 - 1.30
Celery seed oil lb. 11.50 - —
Celery seed, French, bgs lb. .36 - —
Indian, bgs. lb. .21 - —
Cellulose acetate, flake, powd., bgs., l.l. dlvd E lb. .30 - .31
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .349 .359
27% butyryl content, bgs. dlvd, E lb. .500 .600
38% butyryl content, bgs., dlvd, E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd, E lb. .545 - .555
50% butyryl content, bgs. dlvd, E lb. .595 .599
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt. alld lbs. .57 - —
ngs. smaller lots, same basis lb. .59 - —
standard, low or medium vis., bgs., c.l., t.l., frt. alld. E lb. .57 - —
standard, low or medium vis., bgs., ton, frt. alld. E lb. .59 - —
(Cellulose gum prices 1c. per lb. higher in west.)
Cerium hydrate (4% CeO, fib. dms., 100-lb lots or more lb. 1.40 - —
77% CeO, fib dms., 100-lb lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd. lb. 1.85 1.90
bgs., smaller lots, dlvd. lb. 2.15 —
Cetyl alcohol, NF fib cns., c.l., t.l., dlvd E lb. .41¼- —
fib. cns., l.c.l. same basis lb. .43½- —
tanks same basis lb. .39 —
Extra, cns. c.l. t.l., dlvd. E lb. .48½- —
fib cns. l.c.l., same basis lb. .50½- —
tanks, same basis lb. .46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, lb. 1.00 - 1.25
Roman, cs. lb. 1.75 - 2.00
Chamomile oil, blue, Hungarian, bulk lb. 350.00 —
Charcoal, activated NF, fib dms., c.l., works lb. .34 - —
fib. dms., 5-ton lots, works lb. .35 - .35½
fib dms. smaller lots, works lb. .36 - .59
Charcoal, black (see Charcoal, activated)
Charcoal, hardwood, lump, bulk c.l., f.o.b. plant ton. 55.00 - —
briquets, bulk, c.l., f.o.b. plant ton. 80.00 - —
5-lb paper bgs., c.l., same basis ton. 100.00 - —
20-lb paper ngs., c.l., f.o.b. plant, ton. 90.00 - —
60-lb paper bgs c.l. same basis ton. 86.00 - —
Chenopodium oil, NF, ens lb. 4.75 - 5.60
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech. 94% min. dms., c.l., works lb. .33 - —
dms., l.c.l., works lb. .34 - —
tanks, multiple units, 5 cars, dms. l.c.l. works lb. .31 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.60 - —
jars, 500-lb lots lb. 1.63 - —
jars, 100-lb lots or less lb. 1.65 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. .85 - —
dms. l.c.l. 5,000-10,000-lb. lots, frt alld lb. .90 - —
clarified, dms., c.l., frt. alld lb. .89 - —
dms. l.c.l. 5,000-10,000-lb. lots, frt alld lb. .70 - —
Chlorinated paraffin, 40%, dms., c.l., frt. alld lb. .15 - —
dms. l.c.l. 10 dms or more, same basis lb. .16 - —
70% dms., c.l., same basis lb. .18½- —
dms. l.c.l. 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 25 cps., ctns. c.l. works lb. .60 - —
ctns., l.c.l. works lb. .61 - —
125 cps. ctns. c.l., works lb. .70 - —
300 cps. ctns. c.l., works lb. .80 - —
Chlorine, liq., cyls. c.l., works, frt equald lb. .11 - —
cyls., l.c.l., Metropolitan area, same basis lb. .12½- .13¼
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt., equald, same basis 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 3 cars, same basis 100 lbs. 5.35 - 5.85
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99% purif. dms., c.l lb. .23½- .25¼
dms. l.c.l lb. .24½- —
tech., flake 96-97%, dms., c.l., frt. equald lb. .19 - —
dms. l.c.l. frt equald lb. .20 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.30 - —
6-Chloro-2-aminotoluene, tech., liq., dms. frt. alld lb. .60 - —
m-Chloroaniline dms. c.l., frt. alld. lb. .73 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .50 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms. l.c.l. same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 - —
dms. t.l.l. same basis lb. 1.10 - —
p-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.80 - —

o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.15 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works, lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., dlvd lb. .27 - —
dms., l.c.l., dlvd lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .28 - —
2-Chloro-4-nitroaniline, paste, dlvd, E., 100% basis lb. .90 - —
Powd., dlvd. E., 100% basis lb. 1.00 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
4-Chloro-2-nitrophenol, tech., paste, dms. frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .90 - —
o-Chloro-2-nitrotoluene, tech., semd. dms., frt. alld lb. .25 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms. l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt equald lb. .37 - —
dms. l.c.l., same basis lb. .38 - —
Chloropicrin, comi., cyls., 180 lbs., frt alld lb 1.07 - —
cyls., 100 lbs., same basis lb 1.08 - —
cyls., 50 lbs., same basis lb 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c per lb higher
o-Chlorotoluene, tech. dms., t.l., works lb. .37 - —
dms., l.c.l., t.l.l., same basis lb. .38 - —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 - —
Choline chloride, 100-lb dms. frt. equald lb. 1.25 - —
Choline dihydrogen, citrate, 100-lb. dms. frt. equald lb. 1.25 - —
Chrome green, CP dark, light medium blue content, 1-15%, bbls. dlvd E of Rockies, lb. .43 - —
blue content, 16-30%, bbls., same basis lb. .44 - —
41-45%, bbls., same basis, lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c. higher W. of Rockies.
Chrome orange, CP bbls., dlvd E. of Rockies lb. .38 - —
Chrome orange prices 1c. higher W. of Rockies.
Chrome yellow, CP bbls., dlvd E. of Rockies lb .39 - —
Chrome yellow prices 1c. higher W. of Rockies.
Chromic acid, 99.9%, dms., c.l., works, frt. equald lb. .20½- —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, cms., 500-2,000-lb lots, works, lb. .10 - —
Chromium fluoride bbls., works lb .51 - .52
Chromium oxide, hydrated, bbls., fib. dms. c.l. frt. alld. lb. 1.20 - —
Pure, bgs., c.l., frt. alld lb. 44½- —
bgs. l.c.l., same basis lb. 45¼- —
Chromium trioxide, NF bots lb. 1.15 —
Cinchona bark, NF, red, broken, bgs lb .25 - —
NF yellow, broken, bgs lb .35 .40
Cinnamic acid, refd., bots lb 2.50 3.50
Cinnamic alcohol, bots lb 1.50 1.60
Cinnamic aldehyde, dms. lb .90 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .58 - —
Ceylon, No. "0000," bgs. lb. .67 - —
Cinnamon bark oil, bots lb. 55.00 -74.00
Cinnamon leaf oil, crude, dms lb 1.60 2.00
USP (Cassia), ens., dms lb 8.50 -13.50
Citral, CP, bots lb 4.50 - 5.00
Extra, bots lb. 3.00 5.00
Syn., dms lb 7.25 7.40
Citric acid, USP anhyd., fine gran., bgs., dms., c.l lb. 29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 .30½
bgs., dms., smaller lots lb. .33½- .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28½
bgs., dms., 10,000-lb lots, 1 shipt lb. .28 - .28½
bgs., dms. smaller lots lb. .29 .29½
Powdered citric acid ½c. per lb. higher
Citronella oil, Ceylon, dms lb 1.00 —
Java-type, dms. lb. 1.00 - 1.20
Citronellal, bots, dms. lb. 1.40 1.60
Citronellol, bots, dms. lb 1.90 2.50
Synthetic, dms. lb. 1.70 - —
Civet, artif., bots oz 13.75 -15.00
Nat. bots oz 8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Penn ton. 17.50 -21.50
crushed shed moisture, bulk, c.l., Tenn ton 8.00 -11.25
imp. airfloated, bgs., c.l. Atl port net-ton. 43.00 -47.00
lump, bulk, Atl. port net-ton. 31.50 -37.50
Clay, China, dom., dry-grd. air floated, 98%, 325 mesh, Georgia, bgs., c.l., works, ton. 11.00 -17.00
Georgia, bgs., l.c.l., works ton. 13.50 -22.50
Imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton. 23.00 -35.00
white, powd., bgs. c.l. ex dock net-ton. 50.00 —
bgs., l.c.l. ex whse net-ton. 60.00 -70.00
Cleaners naphtha, petroleum, 105° b Flash, tankcars, New Jersey and New York gal. 12 —
Group 3 gal. 12.07½- —
Houston, Texas gal. .145 —
140° F Flash, tankcars, New Jersey or New York gal. .202 - —
Group 3 gal. .154 - —
Houston Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.65 - —
1.6, tech. solid, dms. frt. alld lb .77 - —
1.7 tech., dms. frt. alld lb. 2.20 - —
Clove bud oil, USP, dms. lb. 2.65 - —
Cloves, Madagascar, bgs. lb. .33 - —
Zanzibar, bgs. lb. .37 - —
Clove leaf oil, crude, dms lb. 1.10 - —
CMC, crude, 96.4% low or medium vis bgs., 23,000 lbs., dvld. E., 100% basis lb. .40 - —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 - .46
85% low or medium vis. bgs., c.l., dlvd. E., 100% basis lb. .40 - —
t.l.l., dlvd. E., 100% basis lb. .42 - 1.00
purif. high vis. (see Cellulose gum)
CMC prices W. of the Rockies are ½c. per lb. higher and are on a dlvd. basis.

Coaltar, crude, resale for subs., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse gal. .50 - —
tanks works gal. .20½- —
Coaltar pitch, aluminum, bulk, Works ton 42.00 - —
Carbon, bulk, works ton 42.00 - —
Indust., bulk, works ton 44.00 - —
Core, bulk works ton 40.50 - —
Fiber, bulk works ton 48.00 - —
Roofing, 140-155°F., Federal Specification RP-331 Type I, tanks, works ton 41.00 - —
Cobalt acetate, 23.7% Co., dms., dlvd lb 1.04 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd E of Rockies lb 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies
Cobalt blue imitation (see Ultramarine blue)
Cobalt carbonate, 46% Co., powd., bgs., dlvd lb 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb 1.97 - —
Cobalt linoleate, fused 8½% Co., dms lb .71½- —
Liq., 6% Co., dms lb .57½- —
Cobalt metal, 99% dms., f.o.b. carrier lb 1.50 - —
Cobalt naphthenate liq., 6% Co., dms., dlvd lb .48¾- —
Cobalt nitrate 20.1% Co., bbls., dlvd, lb .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R. lb 1.15 - —
70-71% Co kgs. same basis lb 1.12 - —
Cobalt oxide prices W of Mississippi R. 3c. per pound higher
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb .38½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb .64 - —
Monohydrated, 33% Co., dms., dlvd lb 1.09 - —
Cobalt tallate 8% Co., dms., dlvd, lb .44 - —
Cocaine, USP cns., 100-oz. lots, f.o.b works oz 17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots f.o.b. works oz 13.75 - —
Cocillana bark bls lb .18 - .20
Cocoa butter, bgs. lb .54 - .59
Coconut oil, crude, tanks, New York, lb .12¾- —
tanks, Pac. coast lb .11½- —
Refd., deodorized, dms. lb .19 - .20
Coconut oils, acid, dist. dms. lb .21½- .24
tanks lb .19 - —
double dist. (stripped), dms. lb .22½- .25
tanks lb .20 - —
Cod oil, dms., spot lb .08¼- .08½
Codeine, NF cns. 100-oz. lots oz 13.25 - —
Codeine hydrochloride cns., 100-oz. lots oz 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz 10.25 - —
Codeine sulfate USP cns., 100-oz. lots oz 10.75 - —
Codliver oil, USP, dms. gal 1.40 - 1.70
Cohosh root, black, bls lb .20 - .25
Blue bls lb .20 .25
Colchicine, USP, bots. 27.50 -29.00
Colchicum root bls lb .35 .45
Colchicum seed, bgs. lb .85 - .90
Collodion, USP, dms. lb .32½- —
USP flexible dms lb .34 - —
Colocynth pulp, bls. lb .75 - —
Colombo root, bls lb .16 - .18
Condurango bark bls lb .18 - .20
Congo copal gum, No. 1, bgs. lb .26 - .27
No. 2, bgs lb .23 - .25
No. 3, bgs lb .21 - .24
Copaiba balsam, cns., dms. lb .89 - .90
Copaiba oil cns lb 1.35 - 2.00
Copper acetate bbls., c.l., works. lb .53 - —
bbls., l.c.l. works lb .54 - —
Copper carbonate, 55%, dark dense, c.l., works lb .3545- —
bgs., l.c.l., works lb .3695- —
Copper chloride, cupric, anhyd., dms., works lb .44½- .45
cryst., dihydrate, dms., works, lb .30¾- .31¼
cryst., dried, dms., works lb .38¾- .39¼
cuprous, dms., works lb .5995- .4295
Copper cyanide, tech., dms., 20,000-lb lots or more lb .609 - —
dms., 1,000-lb. lots or more lb .619 - —
dms., smaller lots lb .639 - .65
Copper gluconate, dms lb 2.20 - —
Copper hydrate dry, dms., c.l., frt. E. of Miss. lb .52½- —
dms., l.c.l., same basis lb .53 - —
Copper metal, electrolytic, dlvd, Valley, basis lb .31 - —
Copper naphthenate, liq., 8% Cu, dms. frt alld lb .26½- —
Copper nitrate, tech., cryst., dms., works lb .30¾ .32½
Copper oleate, solid, 8% Cu, dms., works lb .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb .47 - —
red., 97%, USN Type I, bbls., 100-5,000 lbs. lots lb .47½- —
90%, USN Type II, bbls., 100-5,000-lb lots or more, works lb .45¼- —
Copper quinolinolate, 18% Cu, dms., ton lots lb 4.23 - —
10% active quinolinolate, dms lb 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb .47 - —
Copper sulfate, CP, gran., dms., works lb .1885- —
Cryst., 99%, bgs., c.l., works, 100 lbs 12.50 - —
bgs., l.c.l., works 100 lbs 13.00 -15.50
Monohydrated, 35%, dms., c.l., works 100 lbs 23.35 - —
dms., l.c.l., works 100 lbs 24.10 - —
Tribasic, distributors, 50-lb. bgs., c.l., works 100 lbs 28.60 - —
bgs., l.c.l., works 100 lbs 30.10 - —
Copper undecylenate, dms lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. ton 157.00 - —
Pac. ports, c.i.f ton 153.00 - —
Coriander oil, USP, bots. lb 6.50 - 7.25
Coriander seed, Moroccan, bgs. lb .18 - —
Rumanian, bgs. lb .14 - —
Yugoslavian bgs lb .09½- —
Corn oil, crude, tanks, works lb .17 - —
Foots, (soapstock acid 95%) tanks, New York lb .07⅛ Nom.
Refd., salad, dms. lb .2272- .23
tanks lb .2072- —
Corn oil acids, dist., dms. lb .15½- .18
tanks lb .13 - —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs 7.30 - —
paper bgs., l.c.l. 100 lbs 7.45 - —
Corn syrup, 43° Be., tanks, dlvd, N.Y. 100 lbs 6.30 - —
non-ret. dms., c.l., same basis, 100 lbs 7.23 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more gram .95 - 1.75
Costus oil, bots oz 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton 61.50 -62.00
Cottonseed oil, crude, tanks, Southeast lb .13¾- —
tanks, Valley lb .13¼- —
tanks, Texas, Waco lb .13 - —
Foots (soapstock, acid 95%), New York, tanks lb .04⅛ Nom.
Refd., salad, dms. lb .19 - .19¼
tanks lb .17 - —
Cottonseed oil acids, dist., dms lb .15½- .18
tanks lb .13 - —
Coumarin, NF, cryst., dms. lb 3.20 - 3.30
Cramp bark, NF, bls. lb .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. chys., lb 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln. 80%, tanks, works. gal. .226 - —
Refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area lb 1.72 - 1.77
Hardwood, NF, chys., dms., same basis lb 1.42 - 1.47
Pinewood, dms., incl., c.l., works. lb .0611- —
dms. incl., l.c.l. works lb .0684- —
dms. incl., l.c.l. ex whse, New York lb .0795- —
tanks, works lb .0511- —
Creosote oil (see Creosote coaltar).
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb .16½- —
non-ret. dms., l.c.l., same basis lb .17½- —
tanks, same basis lb .145 - —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis lb .18 - —
non-ret. dms., l.c.l., same basis, lb .19 - —
tanks, same basis lb .16 - —
m-Cresol, 95-98% dms., c.l., works, lb .60 - —
dms., l.c.l., works lb .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb .18 - —
dms., l.c.l., same basis lb .19 - —
tanks, same basis lb .16 - —
2,97% 2°C, dms., c.l., frt. equald, lb .22 - —
dms., l.c.l., same basis lb .23 - —
tanks, same basis lb .20 - —
o-Cresol, 30.5°C. m.p. and over, ret., dms., c.l., frt. equald lb .17 - —
ret. dms., l.c.l., same basis lb .16 - —
tanks, same basis lb .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb .16½- —
ret. dms., l.c.l., same basis lb .17½- —
tanks, same basis lb .14½- —
29°-29.9°C, m.p., dms., c.l., frt. equald lb .16 - —
ret. dms., l.c.l., same basis lb .17 - —
tanks, same basis lb .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb .15 - —
ret. dms., l.c.l., same basis lb .16 - —
tanks, same basis lb .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb .52 - —
dms., l.c.l., dlvd lb .53 - —
tanks, dlvd. lb .49 - —
2,3-Cresotic acid, dms., ton lots, works lb .70 - —
dms., smaller lots, works lb .72 - —
p-Cresyl methyl ether, cns lb 1.50 - 2.05
Cresylic acid, coaltar, dom., metapara content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal 1.35 - —
dms., l.c.l., same basis gal 1.40 - —
tanks, same basis gal 1.15 - —
metapara content 25% or less, dms., c.l., t.l., same basis gal 1.30 - —
dms., l.c.l., same basis gal 1.35 - —
tanks, frt. equald gal 1.00 - —
Imp., metapara content 25% or less, f.o.b. works, frt. equald. to competitive points, c.l. gal 1.15 - —
l.c.l., f.o.b., works gal 1.20 - —
tanks, same basis gal 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l, works lb .23 - —
Crotonic acid, 250-lb. dms., c.l., dlvd lb .49 - —
dms., l.c.l., dlvd lb .51 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs 12.00 - —
bgs., l.c.l., works 100 lbs 14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works lb .21 - —
bgs., l.t.l., works lb .22 - —
Cubeb berries, NF, bgs. lb 1.30 - —
Powd., cs. lb 1.45 - —
Cubeb oil, cns lb 8.75 - 9.00

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dms., l.c.l., works lb. .14 • —
tanks, works lb. .11 • —
Cumin seed, Iranian, bgs. lb. .19 • —
Moroccan, bgs. lb. .36 • —
Turkish, bgs. lb. .18 • —
Cumin seed oil, bots., cns. lb. 15.50 • 17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract. ton. 57.00 • —
pulv., 21% N, bgs., works, unit-ton. 2.85 • —
Cyanamide, indust. grade, bgs., c.l., works ton. 75.00 • —
bgs., l.c.l., works ton. 96.00 • —
Indust. grade, 6-16 mesh, dms., c.l., works ton. 120.00 • —
dms., l.c.l., works ton. 140.00 • —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E of Rockies gal. 1.02 • —
dms., l.c.l. same basis gal. 1.10 • —
dms., c.l., dlvd W of Rockies gal. .77 • —
dms., l.c.l., same basis gal. .85 • —
tanks, works gal. .55 • —
96% tech. 40-dm. lots or more, f.o.b. works gal. .56 • —
5-39 dms. same basis gal. .60 • —
tanks, same basis gal. .36 • —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E lb. .30½ • —
dms., l.c.l., works, same basis, lb. .31½ • —
tanks, works, same basis lb. .28 • —
Cyclohexanone, tech., dms., c.l., works lb. .33½ • —
dms., l.c.l., works lb. .34½ • —
tanks, works lb. .31 • —
Cyclohexylamine, tech., dms., c.l., works lb. .49 • —
dms., l.c.l., works lb. .50 • —
tanks, works lb. .47 • —
Cypress oil, bots. lb. 5.30 • —

D

2,4-D tech, bgs., dms., c.l., works, frt. equald lb. .40 • —
bgs. dms. l.c.l., same basis lb. .45 • .49
2,4-D butyl ester dms. c.l., works. lb. .43 • —
dms., l.c.l., same basis lb. .48 • .52
tanks, same basis lb. .42 • —
2,4-D isopropyl ester, dms., c.l., works lb. .43 • —
dms., l.c.l., works lb. .48 • .52
tanks, works lb. .42 • —
Dammar gum Batavia, A E, cs lb. No stocks.
East India, Batu, bold, bgs lb. .15½ • .18
nubs and chips, bgs. lb. .10 • .11
black, bold, bgs lb. .16 • .18
nubs and chips, bgs. lb. .13 • .14½
unscraped, bgs. lb. .13 • .14½
pale, chips, bgs lb. .16 • .18
pale, nubs, bgs. lb. 20¾ • .24
Siam, cs. lb. .31½ • .34
Singapore, No. 1, bgs. lb. .38 • .44
No 2, bgs. lb. .29 • .32
dust, bgs. lb. .18 • .20
No. 3, bgs. lb. No stocks.
Dandelion root, bls lb. .35 • .40
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 • .47
fib. dms., l.c.l., works lb. .46 • .48
DDT, flake or lump, bgs., c.l., dlvd. lb. .21 • —
bgs., smaller lots, same basis lb. .23 • —
fib. dms., c.l., same basis lb. .22 • —
fib. dms., smaller lots, same basis lb. .25 • —
Powdered DDT 1c. per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate).
l-Decanol, tech., dms., c.l., dlvd. E. lb. .41½ • —
dms., l.c.l., dlvd. E lb. .43½ • .44½
tanks, dlvd. E lb. .37½ • —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .20½ • —
dms., l.c.l., dlvd lb. .22 • —
tanks, dlvd. lb. .18 • —
Perfume grade, bots. lb 1.00 • 2.00
Decyl alcohol, normal (see l-Decanol)
Deertongue leaves, bls. lb. .50 • .60
Defluorinated phosphate, feed grade, 14% P paper bgs., c.l., t.l., Tupelo, Miss ton. 52.00 • —
18% P, paper bgs., c.l., Plant City, Fla ton. 61.25 • —
paper bags, c.l., works, Wales, Tenn ton. 66.00 • —
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton. 69.35 • —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l prices
Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 • .14
Neutral (over 2% free fatty acid), 400-lb. dms lb. 13 • —
Denatured alcohol, ethyl CD-18, CD-19, dms., c.l., dlvd. E. of Rockies gal. .69½ • —
dms., l.c.l., same basis gal. .74½ • .80½
tanks, dlvd. same basis gal. .53½ • —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd E of Rockies gal. .72 • —
dms., l.c.l., same basis gal. .77 • .83
tanks, same basis gal. .56 • —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E of Rockies gal. .70½ • —
dms. l.c.l. same basis gal. .75½ • .81½
tanks, same basis gal. .54½ • —
SD2B, dms. c.l. dlvd. E. of Rockies gal. .69 • —
dms., l.c.l., same basis gal. .74 • .80
tanks, same basis gal. .53 • —
SD3A dms. c.l. dlvd. E. of Rockies gal. .68 • —
dms. l.c.l same basis gal. 73 • .79
tanks, same basis gal. .52 • —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½ • —
dms., l.c.l., same basis gal. .75½ • .81½
tanks same basis gal. .54½ • —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l. same basis gal. .76 • .82
tanks same basis gal. .55 • —
SD29, dms., c.l., dlvd. E. of Rockies gal. .69½ • —
dms., l.c.l., same basis gal. .74½ • .80½
tanks, same basis gal. .53½ • —
SD30, dms., c.l. dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
Denatured alcohol, ethyl, SD-40, dms., dlvd. E. of Rockies. gal. .70½ • —
dms., l.c.l., same basis gal. .75½ • .81½
tanks, same basis gal. .54½ • —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb. 15.00 • 17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.50 • —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.39 • —
paper bgs., l.c.l. 100 lbs. 9.54 • —
canary dark, paper bgs., c.l. 100 lbs. 9.23 • —
paper bgs., l.c.l. 100 lbs. 9.38 • —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.13 • —
paper bgs., l.c.l. 100 lbs. 9.28 • —
white paper bgs., c.l. 100 lbs. 8.97 • —
paper bgs., l.c.l. 100 lbs. 9.12 • —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher
Dextrose, anhyd., comi., bgs., c.l. 100 lbs. 8.65 • —
bgs., l.c.l. 100 lbs. 8.80 • —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 • —
100-lb. dms. 100 lbs. 15.20 • —
Hydrated, comi., bgs., c.l., ex whse 100 lbs. 7.45 • —
bgs. c.l., ex whse 100 lbs. 7.60 • —
USP dms. lb. .19¾ • —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½ • —
dms., l.c.l., dlvd. lb. .17 • —
tanks, dlvd lb. .13 • —
Tech., dms., c.l., dlvd. lb. .15 • —
dms., l.c.l., dlvd. lb. .16½ • —
tanks, dlvd lb. .12½ • —
Diacetyl, flavor grade, bots. lb. 3.30 • 4.30
Di-sec-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½ • —
Di-tert-amyl phenol, dms., c.l., works lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½ • —
Diallylamine, dms., c.l., dlvd. lb. .98½ • —
dms., l.c.l., dlvd. lb. 1.00 • —
tanks, dlvd. lb. .96 • —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 • —
Dibenzyl sebacate, dms., c.l., works. lb. .93 • —
dms., l.c.l., same basis lb. .94 • —
tanks, same basis lb. .91 • —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 • —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd. lb. .65 • —
l.t.l., dms., same basis lb. .68 • —
Food grade, c.l., t.l., dms., dlvd. lb. .65 • —
dms., l.t.l., same basis lb. .68 • 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 • —
dms., l.c.l., same basis lb. .60 • —
tanks, same basis lb. .54 • —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½ • —
dms., l.c.l., t.l., dlvd. E lb. .33 • —
tanks, dlvd E lb. .29 • —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½ • —
dms., l.c.l., t.l., dlvd. E lb. .33 • —
tanks, dlvd. E lb. .29 • —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .31½ • —
dms., l.c.l., same basis lb. .33 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .29 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .29 • —
Dibutyl sebacate, dms., c.l., works. lb. .67½ • —
dms., l.c.l., works lb. .68½ • —
tanks, works lb. .65½ • —
Dibutyl tartrate, dms., works, frt. alld lb. .65½ • —
Dibutylamine, dms., c.l., dlvd lb. .55½ • —
dms., l.c.l., same basis lb. .57 • —
tanks, same basis lb. .53 • —
Dicapryl phthalate, dms., c.l., dlvd. lb. .28½ • —
dms., l.c.l., dlvd. lb. .30 • —
tanks, dlvd. lb. .26 • —
Dicapryl sebacate, dms., c.l., works. lb. .63 • —
dms., l.c.l., works lb. .63½ • .64
tanks, works lb. .61 • —
2,5-Dichloroaniline, dms., works lb. .83 • —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 • —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾ • —
dms., l.c.l., same basis lb. .13¾ • —
tanks, same basis lb. .11 • —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 • —
dms. 2,000 lbs. or more same basis lb. .14½ • —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½ • —
dms., l.c.l., or t.l., works lb. .34 • —
tanks, works lb. .32 • —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½ • —
dms., l.c.l., t.l., same basis lb. .17 • —
tanks same basis lb. .13 • —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 • —
dms., l.c.l. same basis lb. .75 • —
Dichloropentanes, dist., dms., c.l., works lb. .05 • —
dms., l.c.l., works lb. .06 • —
tanks works lb. 03 • —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine dms. c.l., works. lb. .54 • —
dms., l.c.l., works lb. .55 • —
tanks, works lb. .52 • —
Dicyclohexyl phthalate, gran., fib. dms. c.l. works frt alld. lb. .49½ • —
fib. dms., l.c.l., same basis lb. .51½ • —
Dicyclopentadiene dms. c.l., t.o.b. works lb. .14½ • —
dms., l.c.l., same basis lb. .14¾ • —
tanks same basis lb. .12 • —
Didecyl phthalate dms. c.l., works. lb. .27½ • —
dms., l.c.l., same basis lb. .29 • —
tankcars, tanktrucks, 2,000 gals. lb. .25 • —
tanktrucks, 1,000-1,999 gals, same basis lb. 26½ • —
Dieldrin, dms., c.l. dlvd. lb. 1.85 • —
dms. l.c.l dlvd. lb. 1.90 • —
Diethanolamine dms. c.l., dlvd. E. lb. .27 • —
dms., l.c.l., same basis lb. .28½ • —
tanks, same basis lb. .24½ • —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½ • —
dms., l.t.l., frt. alld. lb. .28½ • —
tanks, frt. alld. lb. .26½ • —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., t.o.b. works lb. .47½ • —
dms., l.c.l., same basis lb. .48½ • —
tanks, same basis lb. .45 • —
Diethyl ethanolamines, dms., c.l., dlvd lb. .60½ • —
dms., l.c.l., dlvd. lb. .71 • —
tanks, dlvd. lb. .67 • —
Diethyl oxalate, dms., c.l., t.o.b. works lb. .42½ • —
dms., l.c.l., same basis lb. .43½ • —
tanks, same basis lb. .40 • —
Diethyl phthalate, dms., c.l., dlvd. lb. .29¾ • —
dms., l.c.l., dlvd. lb. .31¼ • —
tanktrucks, 1,000-1,999 gals. same basis lb. .27¾ • —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .27¼ • —
Diethyl sulfate, dms, c.l., frt. alld. E. lb. .21 • —
dms., l.c.l., frt. alld. E lb. .22½ • —
tanks, frt. alld. E lb. .18½ • —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 • —
dms., l.c.l., same basis lb. .59 • —
Diethyl toluamide, 90-95% meta isomer dms. c.l., t.l., works. lb. 2.30 • —
5-44 dm. lots, works lb. 2.35 • —
1-4 dm. lots, works lb. 2.40 • —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 • —
Diethylamine, dms., c.l., dlvd E lb. .52 • —
dms., l.c.l., same basis lb. .53½ • —
tanks, same basis lb. .49½ • —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 • —
dms., l.c.l., same basis lb. .58 • —
tanks, same basis lb. .55 • —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt alld., Zone 1 lb. .17½ • —
f.o.b. Zone 2 lb. .18½ • —
380-lb. dms., l.c.l., c.l., f.o.b. Zone 1 lb. .19½ • —
f.o.b. warehouse points, Zone 2 lb. .20½ • —
tankcars, Zone 1 lb. .15 • —
Zone 2 lb. .16 • —
Zone 1 is East of the Rockies. Zone 2, West of the Rockies
Di-2-ethylhexyl adipate (see Di-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-octyl phthalate).
Diethylene glycol dms. c.l., dlvd E. works lb. .17¾ • —
dms., l.c.l., same basis lb. .19¼ • —
tanks, same basis lb. .15¼ • —
Diethylene glycol diethyl ether, dms., c.l., works lb. .55 • —
dms., l.c.l., works lb. .55¾ • —
Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E lb. .30¾ • —
dms., l.c.l., frt. alld. E lb. .32¼ • —
tanks, frt. alld. E lb. .28¼ • —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾ • —
dms., l.c.l., works lb. .31½ • —
tanks, works lb. .28¾ • —
Diethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .22½ • —
dms., l.c.l., dlvd. E lb. .24 • —
tanks, dlvd E. lb. .20 • —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼ • —
dms., l.c.l., works lb. .28 • —
tanks, works lb. .25¼ • —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 • —
dms., l.c.l., dlvd. E lb. .22½ • —
tanks, dlvd. E lb. .18½ • —
Diethylenetriamine, dms., c.l., dlvd, E lb. .44 • —
dms., l.c.l., dlvd. E. lb. .45½ • —
tanks, dlvd E. lb. .41½ • —
Diethystilbesterol, USP, bots., 10-kilo lots kilo. 100.00 • 147.50
bots, 1-kilo lot kilo. 110.00 • 152.50
Digitalis leaves USP dom. dms lb. 1.25 • —
Digitoxin, USP, bots gram. 3.75 • 4.20
Diglycol laurate, dms., ton lots lb. .32½ • —
Diglycol stearate, dms., t.l lb. .26 • —
Diglycolic acid, bgs., c.l., t.l., works. lb. .15½ • —
bgs., l.c.l., works lb. .16 • —
Dihexyl sebacate, dms., c.l., works. lb. .66 • —
dms., l.c.l., works lb. .67 • —
tanks, works lb. .64 • —
Dihydrazine sulfate, dms., works lb. 1.10 • 1.25
Dihydrostreptomycin sulfate, bulk. gram. .03 • —
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 • —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 • —
Tech., dms., 20,000 lbs or more lb. 1.11 • —
dms., 1,050 lbs to 20,000 lbs. lb. 1.13 • —
dms., 150 lbs to 1,050 lbs lb. 1.15 • —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 • —
dms., l.c.l., dlvd. lb. .18½ • —
tanks, dlvd lb. .14½ • —
Di-isobutyl phthalate, dms., c.l., dlvd. E. lb. .31½ • —
dms., l.c.l., same basis lb. .32½ • —
tanks, same basis lb. .29 • —
Di-isobutylene dms. c.l., dlvd. E lb. .10 • —
dms., l.c.l., dlvd. E lb. .11½ • —
tanks, dlvd E. lb. .08 • —
Di-iso-octyl phthalate, dms., c.l., works lb. .29 • —
dms., l.c.l., same basis lb. .30½ • —
tanktrucks, 1,000-1,999 gals., works lb. .27 • —
tankcars, tanktrucks, 2,000 gals., works lb. .26½ • —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 • —
dms., l.c.l., works lb. .61¼ • —
tanks, works lb. .60 • —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼ • —
dms., l.c.l., same basis lb. .24¾ • —
tanks, same basis lb. .20¾ • —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½ • —
dms., l.c.l., same basis lb. .52 • —
tanks, same basis lb. .48 • —
Dillweed oil, dom., bots., dms lb. 5.25 • —
Dimethyl anthranilate, cns lb. 4.15 • —
Dimethyl dichlorovinyl phosphate, 55-gal dms., dlvd lb. 3.50 • —
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E lb. .78 • —
dms., l.c.l., dlvd. E lb. .79½ • —
tanks, dlvd. E lb. .75½ • —
Dimethyl ethanolamine, 70%, dms., c.l., dlvd., 100% basis, contained amines lb. .78 • —
dms., l.c.l., dlvd., 100% basis. lb. .79½ • —
tanks, dlvd., 100% basis lb. .75½ • —
Dimethyl hydroquinone, dms. lb. 1.90 • 2.20
Dimethyl phthalate, dms., c.l., works lb. .29¾ • —
dms., l.c.l., works lb. .31¼ • —
tanktrucks, 1,000-1,999 gals., same basis lb. .27¾ • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .27¼ • —
Dimethyl sebacate, dms., c.l., works. lb. 1.30 • —
dms., l.c.l., works lb. 1.30½ • 1.31
tanks, works lb. 1.28 • —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½ • —
ret. dms., l.c.l., works lb. .18½ • —
tanks, works lb. .16½ • —
Dimethyl sulfide, dms., c.l., works. lb. .17½ • —
dms., l.c.l., works lb. .18½ • .19¼
tanks, works lb. .15 • —
Dimethyl sulfoxide, dms., c.l., f.o.b. works lb. .35 • —
dms., l.c.l., same basis lb. .37 • .38
tanks, same basis lb. .33 • —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 • —
dms., l.c.l., frt. equald, 100% basis lb. .38½ • —
tanks, frt. equald, 100% basis. lb. .28 • —
40% soln., dms., c.l., frt. equald., 100% basis lb. .35 • —
dms., l.c.l., frt. equald, 100% basis lb. .35½ • —
lb. .28 • —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 • —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .26 • —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½ • —
dms., l.c.l., works lb. .33 • .34
tanks, works lb. .30 • —
2,4-Dinitroaniline, dms., frt. alld lb. .75 • —
Dinitroaniline orange toner CP, bbls., dlvd. E. of Rockies. lb. 1.61 • —
Dinitroaniline orange toner prices 1c. higher W of Rockies.
m-Dinitrobenzene, 89°C., dms. lb. .26 • —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼ • —
dms., l.c.l., frt. alld. E lb. .17¾ • —
tanks, frt. alld. E lb. .17 • —
2,4-Dinitrophenol bbls. lb. .41 • —
2,4-Dinitrotoluene, oil, dms. lb. .11 • —
Refd., 63°C., dms. lb. .23 • —
Dioctyl adipate, dms., c.l., works lb. .38½ • —
dms., l.c.l., works lb. .39½ • —
tanks, works lb. .36 • —
Dioctyl phthalate, dms., c.l., frt. alld. E lb. .27 • —
dms., l.c.l., frt. alld. E lb. .29½ • —
tanktrucks, 1,000-1,999 gals., same basis lb. .25 • —
tankcars, tanktrucks, 2,000 gals., same basis lb. .24½ • —
Dioctyl phthalate prices ¾c. higher in West.
Dioctyl sebacate, dms., c.l., works. lb. .61¼ • —
dms., l.c.l., works lb. .62¼ • —
dms., l.c.l., works lb. .62¼ • —
tanks, works, dlvd. lb. .59¼ • —
1,4-Dioxane, dms., c.l., frt. alld. E. lb. .31½ • —
dms., l.c.l., frt. alld. E lb. .33 • —
tanks, frt. alld. E lb. .29 • —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs. c.l. t.l., dlvd. E lb. .34 • —
bgs., l.c.l., l.t.l., dlvd. E lb. .35 • —
Dipentene, dest.-dist., dms., c.l., works gal. .58 • —
dms., l.c.l., works lb. .62 • —
dms., l.c.l. ex whse. gal. .78 • —
tankscars, works gal. .41 • —
Steam dist., dms., c.l., works, South gal. .72 • —
dms., l.c.l., dlvd. New York gal. .91 • —
tanks, works, South lb. .55 • —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .75 • —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.00 • —
Diphenyl, bgs., c.l., t.l., works lb. .16¾ • —
bgs., l.c.l., works lb. .18½ • —
tanks, works lb. .15¾ • —
Diphenyl oxide, perfume grade, cns. lb. .55 • .70
Diphenyl phthalate, dms., c.l., works. lb. .52 • —
dms., l.c.l., works lb. .54 • —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .32 • —
bgs., l.c.l., same basis lb. .34 • —
Refd., fused, tanks, same basis lb. .29 • —
Refd., diphenylamine in dms., ½c. per lb higher
Diphenylguanadine bgs., dms., ton lots, frt. alld lb. .51 • —
bgs., smaller lots, frt. alld lb. .52 • —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 • 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17 • —
dms., l.c.l., frt. alld. lb. .18½ • —
tanks, frt. alld. lb. .14¼ • —
Dipropylene glycol prices 1c. higher in West.
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 • —
dms., l.c.l., same basis lb. .21½ • —
tanks, same basis lb. .18½ • —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.80 • —
Di-o-tolyiguanidine, dms., ton lots, frt. alld lb. .71 • —
dms., smaller lots, frt. alld lb. .72 • —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 • —
Divinylbenzene, 20-25%, dms., c.l., works, frt equald lb. .20 • —
dms., l.c.l., same basis lb. .21 • —
tanks, same basis lb. .19 • —
50-60%, dms., c.l., works, 100% basis lb. 1.00 • —
dms., l.c.l., works, 100% basis. lb. 1.05 • —
tanks, same basis lb. .90 • —
Dodecenyl succinic anhydride, dms., c.l., t.l., dlvd. E lb. .50 • —
dms, l.c.l., t.t.l., same basis lb. .52 • —
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald lb. .134 • —
dms., l.c.l., same basis lb. .144 • —
tanks, same basis lb. .11 • —
Dodecylphenol, c.l., frt. alld lb. .22½ • —
dms., l.c.l., same basis lb. .23½ • —
tanks, same basis lb. .20 • —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 25-lb.lots, frt. prepaid or alld.
Blue, FD&C, No. 1 lb. 15.65 • 16.45
No. 2 lb. 15.65 • 16.45
Green, FD&C, No. 1 lb. 15.65 • 16.45
No. 2 lb. 19.60 • 20.40
No. 3 lb. 31.30 • 32.10
Red, FD&C, No. 2 lb. 3.60 • 4.40
No. 3 lb. 19.60 • 20.40
No. 4 lb. 6.60 • 6.80
Yellow, FD&C, No. 5 lb. 3.75 • 4.55
No. 6 lb. 3.65 • 4.45
Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:
Black, D&C, No. 1 lb. 10.50 • 10.95
Brown, D&C, No. 1 lb. 15.65 • 16.10
Green, D&C, No. 5 lb. 15.65 • 16.10
No. 6 lb. 15.65 • 16.10
No. 7 lb. 14.35 • 14.80
Orange, D&C, No. 3 lb. 10.50 • 10.95
No. 4 lb. 19.60 • 20.05
No. 5 lb. 3.80 • 4.25

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

Red, D&C, No. 17	lb.	10.50	-10.95
No. 18	lb.	33.60	-34.00
No. 19	lb.	15.00	-15.45
No. 21	lb.	3.90	4.35
No. 22	lb.	10.50	-10.95
No. 28	lb.	24.15	-24.65
No 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No. 7	lb.	10.50	-10.95
No. 8	lb.	10.50	-10.95
No. 10	lb.	13.05	-13.50
No 11	lb.	13.05	-13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:

Blue, Ext., D&C, No. 1	lb.	15.65	-16.10
Green, Ext., D&C, No 1	lb.	15.65	-16.10
Red, Ext., D&C, No. 1	lb.	13.05	-13.50
Yellow, Ext, D&C No 1	lb.	10.50	10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.

11110	Brilliant scarlet BN	lb.	1.79	- —
13390	Fast blue SR	lb.	1.57	- —
14025	Yellow 2G	lb.	1.26	- —
14030	Orange R, extra, conc.	lb.	1.64	- —
14645	Chrome black T	lb.	.77	- —
14720	Rubine XX, conc	lb.	1.76	- —
15510	Orange Y, extra conc.	lb.	.83	- —
15575	Orange RR	lb.	.99	- —
15620	Fast Red A, conc.	lb.	1.77	- —
15705	Chrome blue black R, conc.	lb.	1.12	- —
16150	Scarlet 2RL	lb.	1.22	- —
16255	Brilliant scarlet 3RN, conc.	lb.	1.26	- —
16230	Fast light, orange 2G	lb.	1.39	- —
17590	Brown PG	lb.	3.00	- —
18050	Phloxine 2G	lb.	1.16	- —
18055	Fuchsine 6B	lb.	1.55	- —
18965	Fast yellow 2G	lb.	2.32	- —
19140	Yellow XX	lb.	2.48	- —
19555	Yellow NN, conc.	lb.	3.67	- —
20170	Brown Y	lb.	1.53	- —
20470	Blue black, extra, conc.	lb.	1.44	- —
21010	Brown, RX, conc	lb.	1.42	- —
22240	Scarlet B	lb.	2.81	- —
22310	Red FC	lb.	1.57	- —
22311	Brown MCW	lb.	1.59	- —
22510	Blue 2B, extra conc.	lb.	1.51	- —
23500	Red 4BX, conc.	lb.	1.80	- —
24410	Sky blue FF, extra conc.	lb.	1.95	- —
24895	Brilliant yellow, conc	lb.	3.27	- —
26360	Navy blue 3R, conc	lb.	1.84	- —
26395	Black F, conc.	lb.	2.30	- —
26900	Milling Red 3R, conc	lb.	2.24	- —
27075	Neutral black 2B, conc.	lb.	2.75	- —
27720	Gray L.	lb.	2.18	- —
29185	Fast scarlet 4BNC	lb.	2.23	- —
30015	Diazo black VJ conc.	lb.	2.48	- —
30045	Yellow brown K, extra	lb.	1.45	- —
30235	Black EB, 200%	lb.	1.33	- —
30295	Green BY conc.	lb.	1.07	- —
35660	Brown B	lb.	2.89	- —
37565	Naphthol SWF	lb.	1.85	- —
40000	Yellow 2G	lb.	1.44	- —
41000	Yellow OX	lb.	2.45	- —
42000	Green V crystals	lb.	2.73	- —
42040	Brilliant green G crystals	lb.	3.62	- —
42090	Blue EG	lb.	1.85	- —
42100	Milling green 6B, conc.	lb.	4.78	- —
42640	Violet 4BXN	lb.	2.43	- —
43830	Brilliant blue, BBG	lb.	2.44	- —
44045	Blue B, extra conc.	lb.	3.61	- —
45170	Red BX	lb.	4.76	- —
50415	Nigrosine SSJ	lb.	1.03	- —
52015	Blue GXX	lb.	2.54	- —
58005	Alizarin red SC	lb.	3.64	- —
59700	Golden orange GFD, single paste	lb.	2.70	- —
59710	Flaming orange 6RD double powder	lb.	4.90	- —
59800	Dark blue BO, single paste.	lb.	2.28	- —
59825	Jade green NC supra, double paste	lb.	1.75	- —
61570	Alizarin green CG extra	lb.	3.81	- —
63010	Alizarin blue SAPG	lb.	3.90	- —
63315	Alizarin blue black B	lb.	3.26	- —
69825	Blue BLFD double paste	lb.	2.76	- —
70300	Brown BR single paste	lb.	2.03	- —

Dyes, coaltar, oil-soluble, 100-lb drums, dlvd. No.

12140	Oil scarlet BL	lb.	1.87	- —
12055	Oil orange 7078 V	lb.	1.38	- —
26120	Oil red N 1700	lb.	1.94	- —
42535B	Methyl violet base	lb.	1.83	- —
44045B	Victoria blue base	lb.	4.06	- —
50415B	Oil black 8603	lb.	.80	- —
61565	Alizarin cyanine green base.	lb.	6.13	- —

Dyes, coaltar, spirit soluble, 100 lb.

	dms., dlvd., Black RB	lb.	3.89	- —
	Spirit brown GN	lb.	5.80	- —
	Spirit orange R conc.	lb.	5.87	- —
	Spirit red B conc	lb.	6.41	- —
Pr	517 Spirit yellow 2R conc	lb	4.62	- —
Pr	554 Spirit blue THN	lb	5.06	- —

E

Echinacea root, bls.		lb.	1.25	—
Elm bark, grinding, bls.		lb.	.30	- .33
Powd., bbls., kgs		lb.	.60	- —
Select, bundles		lb	75	- —
Emetine hydrochloride, USP, bots		oz.	43.40	- —
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd		lb.	2.77	- —
Eosin red toner, bbls., works		lb.	1.95	- —
Ephedrine, syn., USP, anhyd., bots. 100-oz.lots		oz.	.96	- 1.00
hydrous, bots., 100-oz. lots.		oz.	.92	- —
Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works		oz.	.75	- —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works		oz.	.73	- —
USP, powd., dms., 100-oz., same basis		oz.	.73	- —
Epichlorohydrin, dms., c.l., dlvd		lb.	.29½	- —
dms., l.c.l., dlvd.		lb.	.31	- —
tanks, dlvd.		lb.	.27	- —
Epinephrine base, syn., USP, bots., 100 gram. lots		gram.	.58	- —
Epsom salt (see Magnesium sulfate).				
Erigeron oil, cns.		lb.	11.00	- —
Ergot, NF, dms., tin-lined		lb.	2.00	- 2.50
Eserine salicylate, bots.		oz.	34.50	-40.00
Eserine sulfate, bots.		oz.	28.00	- —
Ester gum, gum-rosin type, dms. c.l., dlvd., Ill., Md., Ky. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va		lb.	.18¼	- —
Wood-rosin type, dms. c.l., same basis		lb.	.18½	- —
Ether (see specific product)				
Ethyl acetate, nat., ferment, 85-88%, dms. c.l. dlvd		lb.	.15	- —
dms., l.c.l., dlvd		lb.	.16½	- —
tanks dlvd		lb.	.12½	- —
85-98% dms. c.l., dlvd		lb.	.15¼	- —
dms., l.c.l., dlvd		lb.	.16¾	- —
tanks dlvd		lb.	12¾	- —
99%, dms., c.l., dlvd		lb.	.15½	- —
dms. c.l., dlvd		lb	17	- —
tanks, dlvd		lb	13	- —
Syn., 85-98%, dms., c.l., dlvd		lb.	.15	- —
dms., l.c.l., dlvd		lb	.16½	- —
tanks, dlvd		lb.	12½	- —
85-98%, dms., c.l., dlvd		lb.	.15¼	- —
dms., l.c.l., dlvd		lb.	.16¾	- —
tanks dlvd		lb.	12¾	- —
99%, dms., c.l., dlvd		lb.	.15½	- —
dms., l.c.l., dlvd.		lb	17	- —
tanks, dlvd.		lb.	.13	- —
Ethyl acetoacetate, dms., c.l., dlvd.		lb.	83½	- —
dms., l.c.l., dlvd.		lb.	.90	- —
tanks, dlvd.		lb.	.86	- —
Ethyl acrylate, dms., c.l., t.l., dlvd.		lb.	.34¼	- —
dms., l.t.l., dlvd		lb.	.35¾	- —
tanks, dlvd.		lb.	.32¼	- —
Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., dlvd. E. of Rockies		gal.	20.63	- —
dms., l.c.l., same basis		gal.	20.73	-20.84
USP, tax-free, dms., c.l., dlvd. E. of Rockies		gal.	.68	- —
dms., l.c.l., same basis		gal.	.78	- .89
tanks, same basis		gal.	.52	- —
Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd E. of Rockies		gal.	21.75	- —
dms., l.c.l., same basis		gal.	21.85	-21.96
tanks, same basis		gal.	21.59	- —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl)				
Ethyl aminobenzoate, USP (see Benzocaine).				
Ethyl amyl ketone, dms., c.l., dlvd.		lb.	.20	- —
dms. l.c.l. same basis		lb.	.21½	- —
tanks, same basis		lb.	17½	- —
Ethyl benzoate, bots.		lb.	.75	- 1.00
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E.		lb.	.43	- —
dms. l.c.l., frt. alld. E.		lb.	.45	- —
tanks, frt. alld. E.		lb.	.40	- —
2-Ethyl butyl alcohol, dms., c.l., works		lb.	.30	- —
dms., l.c.l., works		lb.	.30¾	- —
tanks, works		lb.	.28	- —
Ethyl butyl ketone, dms., c.l., t.l., works		lb.	.36	- —
dms. l.c.l., t.l. works		lb.	.36¾	- —
tanks works		lb.	.34	- —
Ethyl butyrate, dms. works		lb.	.85	- 1.00
Ethyl carbamate (see Urethane).				
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb lots or more, frt. alld. E.		lb.	.72	- —
bgs., smaller lots, frt. alld E.		lb.	.75	- —
vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E.		lb.	.68	- —
bgs., smaller lots, frt. alld E.		lb.	.70	- —
Ethyl chloride, tech., cyls., works.		lb.	.20	- .22
dms., works		lb.	.18	- .20
tanks, works		lb.	.10	- —
Ethyl cinnamate, cns.		lb.	3.35	- 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd. E		lb.	.43½	- —
dms., l.c.l., dlvd. E		lb.	.44½	- —
tanks, dlvd E		lb.	.41½	- —
Ethyl ether, absolute, ACS, dms.		lb.	.37	- —
Anesthesia, USP, dealers, 1-lb. cns.		lb.	1.01	- —
½-lb. cns		lb.	1.09	- —
¼-lb. cns.		lb.	1.21	- —
Indust., dms. c.l., dlvd.		lb.	.13½	- —
dms., l.c.l., dlvd. E.		lb.	.15	- —
tanks, dlvd E.		lb.	.11	- —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E		lb.	.37	- —
dms., l.c.l., t.l., dlvd. E.		lb.	.38½	- —
tanks, dlvd E.		lb.	.34½	- —
2-Ethyl hexoic acid 1c, higher W. of Rockies.				
2-Ethylhexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E.		lb.	.39½	- —
dms., l.t.l., same basis		lb.	.40½	- —
tanks, same basis		lb.	.37	- —
2-Ethylhexyl alcohol, dms., c.l., dlvd. E		lb.	.20½	- —
dms., l.c.l., dlvd. E		lb.	.22	- —
tanks, dlvd. E		lb.	.18	- —
Ethyl iodide chys. works		lb	3.30	- —
Ethyl methacrylate dms., c.l., frt. equald		lb	52	- —
dms., l.t.l. frt. equald		lb	52½	- —
tanks, frt. equald		lb	50	- —
Ethyl morphine hydrochloride, USP bots		oz.	11.85	- —
Ethyl oenanthate dms		lb	1.05	1.30
Ethyl oxalate (see Diethyl oxalate)				
Ethyl silicate dist (see Tetraethyl orthosilicate).				
Ethyl silicate 40% available SiO_2 dms., c.l., dlvd. E		lb.	.49	- —
dms., l.c.l., dlvd. E		lb.	.50½	- —
tanks, dlvd. E		lb.	.47	- —
N-Ethyl-a-naphthylamine, dms., works		lb	1.04	- —
N-Ethyl-m-toluidine, tech., tq., tanks frt. alld		lb.	.83	- —
N-Ethyl-o-toluidine, bbls		lb.	.85	- —
Ethylamine (see Mono-, Di- or Tri-)				
N-Ethylaniline, dms. c.l., frt. alld.		lb.	.57	- —
dms., l.c.l. frt. alld		lb.	.58	- —
tanks, frt. alld		lb.	.55	- —
Ethylbenzene, 99% dms., c.l., t.l., frt. equald		lb.	.14	- —
dms., l.c.l., same basis		lb.	.16	- —
tanks, same basis		lb.	.11½	- —
Ethylene, contract refy gate		lb	.0475	- .053e
Ethylene dibromide dms., c.l., frt. equald		lb.	.30½	- —
dms., l.c.l. frt equald		lb.	.31½	- —
tanks, frt. equald		lb.	.28½	- —

HARDWORKING JEFFERSON CHEMICALS

ETHYLENE OXIDE and PROPYLENE OXIDE

ETHYLENE OXIDE

SPECIFICATIONS

Water, wt.%	0.03 max.
Aldehyde as acetaldehyde, wt.%	0.010 max.
Acidity as acetic, wt.%	0.002 max.
Non-volatile residue, gms./100 ml	0.010 max.
Residual odor	None
Color	Water-white
Inorganic chloride as Cl	Nil
Acetylene	Nil

SELECT PROPERTIES

Boiling point, 760 mm	10.73°C.
Explosive limits in air by volume	3-100%
Flash point (open cup)	<0°F.
Specific gravity, 20/20°C	0.8711
Specific heat (liquid)	0.44 cal./gm./°C.
Weight, 20°C	7.25 lbs./gal.

PROPYLENE OXIDE

SPECIFICATIONS

Specific gravity, 20/20°C	0.829 min. 0.831 max.
Acidity as acetic, wt.%	0.005 max.
Water, wt.%	0.10 max.
Color, Pt-Co scale	10 max.
Residual odor	None
Aldehyde as propionaldehyde, wt.%	0.05 max.
Boiling range, ASTM, °C	33.0-37.0

SELECT PROPERTIES

Boiling point, 760 mm	34.1°C.
Explosive limits in air by volume	2.1-38.5%
Flash point (open cup)	−35°F.
Specific gravity, 20/20°C	0.8305
Specific heat (liquid)	0.51 cal./gm./°C.
Weight, 20°C	6.92 lbs./gal.

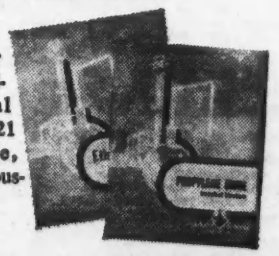
SHIPPING AND HANDLING

Ethylene oxide and propylene oxide are available from Jefferson in 10,000-, 6,000-, and 4,000-gal. tank cars (I.C.C. Spec. 105-A-100-W) and E. O. in 400-lb. net drums (I.C.C. Spec. 5P), P. O. in 370-lb. net drums (I.C.C. Spec. 17C) . . . red labels required.

Both ethylene oxide and propylene oxide represent a potential hazard in handling and storage. All equipment including piping, storage tanks and relief valves used in the handling of these oxides should be of carbon steel or stainless steel and with a minimum working pressure of 50 psig. Complete methods of handling and precautionary measures are available from our technical service people . . . let them assist you in any phase of your oxide program.

TECHNICAL INFORMATION

For detailed specifications, applications, storage, handling and bibliography on ethylene oxide and propylene oxide, request the respective Technical Brochures. Also, comprehensive literature surveys on these two oxides are yours for the asking . . . Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.



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CHARLOTTE • LOS ANGELES • SAN FRANCISCO

JEFFERSON CHEMICALS

Ethylene dichloride dms., c.l., dlvd. lb .11½- —
dms., t.c.l., same basis .13 —
tanks, same basis .09 —
Ethylene dichloride prices W. of Rockies, 1c per lb higher
Ethylene glycol, indust., dms., c.l., dlvd E lb. .16 —
dms., t.c.l., same basis lb. .17½ —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd E lb .22 —
dms., t.c.l., dlvd E lb. 23½- —
tanks, dlvd E lb. 19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd E lb .21 —
dms., t.c.l., dlvd. E lb. 22½- —
tanks, dlvd E lb. 18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., t.c.l., dlvd. E lb. .21 - —
tanks, dlvd E lb. .17 - —
Ethylene glycol monomethyl ether, dms c.l., dlvd E lb .21 - —
dms., t.c.l., dlvd E lb. .22½- —
tanks, dlvd E lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., works lb. .29 - —
dms., t.c.l., works lb. .29¾- —
tanks, works lb. .27 - —
Ethylene glycol monostearate, flake, 150-lb ctn lb. .33 - —
Ethylene oxide, dms., c.l., dlvd E. lb. .21½- —
dms., t.c.l., dlvd E lb. .24½- —
tanks, dlvd E lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .40 - —
dms t.c.l. dlvd E. 100% basis. lb. .41½- —
tanks, dlvd. E., 100% basis lb. .38 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. 6.75 - —
less than 500-lb. lb. 7.40 - —
Eucalyptol, USP, cns., dms lb. .85 1.40
Eucalyptus oil, NF rectified, 70-75%, dms lb. .45 — .62
NF rectified, 80-85% dms lb. .53 —
Eugenol, tech., dms lb. 0.00 - —
USP, dms. lb. 1.90 - —
Euphorbia herb, bls lb. .12 - .15

F

F salt paste, tech., dms., works lb. 2.50 - —
Fennel oil, sweet, USP, cns. lb. 2.60 - —
Fennel seed, Argentine, bgs. lb. .17 - —
French, light, bgs lb. .16 - —
Indian, light, bgs lb. .17½- —
Rumanian, bgs lb. .14 - —
Yugoslav light bgs lb. .16½- —
Fenugreek seed, Moroccan, bgs lb. .09 - —
Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs. 8.00 - —
dms., t.c.l., works 100 lbs. 9.00 - —
Indust., cryst., bbls., c.l., works, 100 lbs. 5.25 - 6.75
bbls. t.c.l., works 100 lbs 5 75 7.25
42° Be. photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
sewage grade, tanks, frt equald. 100% basis 100 lbs 4.00 - —
USP cryst. dms., t.l., works lb. .08½- —
Ferric citrate, gran., dms. lb. .86 - —
Ferric hypophosphite, NF. 175-lb. dm lb. 4.25 - —
Ferric naphthenate, liq., 6% Fe, dms. frt alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. 1.30 - —
Ferric oxides (see iron oxides).
Ferric phosphate NF, soluble, gran. pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran. pearls, 225-lb. dm.lb. 79 - —
Ferric resinate, dms., ton lots, frt. alld lb. .45 - —
Ferric stearate dms., c.l., frt. alld. lb. .39 - —
dms. t.c.l., frt alld lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton.35.25 —
bgs., t.c.l., works ton.36.25 -42.25
bulk, c.l., works ton.33.25 - —
Ferric-amonium citrate, NF, brown, gran., 100-lb. dms lb. .68 - —
NF, green, gran., 100-lb. dms., frt. equald lb. .68 - —
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., 250-lb dm., f.o.b. works lb. .32½- —
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton.34.50 - —
bgs., t.c.l., dlvd. Metropolitan area 100 lbs 3.35 4.25
bbls., c.l., works ton 40.00 —
bulk, c.l., works ton.27.00 —
USP cryst., bbls., dms lb 09½- .10
Fir balsam, Canada, bbls gal.34.00 -35.00
Oregon bbls gal 3.40 4.64
Fir oil, Canada, cns 1.70 - 1.75
Fish oil, refd., alkali, dms lb. .1380- .1430
Kettle-bodied, dms. lb. .1530- .1580
Light-pressed, dms. lb. .1280- .1330
tanks lb. .1080- —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton.108.00 -110.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton.102.00 -106.00
Fleaseed (see Psyllium seed)
Folic acid, USP, nots fib dms., kilo lots or more gram .25 - —
10% feed grade fib dms, 3 kilos or more kilo 30.00 -44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l. dlvd lb. .0695- —
tanks, dlvd. lb. .0405- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85%, cbys. c.l., works, lb. .1570- —
cbys. t.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys. t.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .65 .70
Fumaric acid, tech., 250-lb dms., c.l., frt. equald lb. 23¼- —
dms., t.c.l., frt equald lb. 24½- —
Fumaric acid in bags ½c. per lb less.
Furfural, dms. c.l., works lb. .13 - —
dms, t.c.l., works lb. .14 - —
tanks, dlvd. E lb. .11½- —
tanks, dlvd. W lb. .12½- —
Furfuryl alcohol, cns., works lb. .28 - —
dms., c.l., t.l., Newark, N. J. lb. .19½- —
dms., t.c.l., t.t.l., Newark, N. J. lb. .20½- —
dms., c.l., t.l., Memphis, Tenn. lb. .18 - —
dms., t.c.l., t.t.l., Memphis, Tenn. lb. .19 - —
tanks, dlvd. E. of Denver lb. .175 - —
Fusel oil, refd. dms., c.l., dlvd lb. .18 - —
dms., t.c.l., dlvd. lb. .19½- —
tanks, dlvd. lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb. lots lb. 2.00 —
bbls., smaller lots lb. 2.02 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 6.05
Imp., bots. oz. 4.50 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible 75 AOAC test, bbls., c.l., dlvd lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls. c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsemium root, bls. lb. .30 - .35
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs lb. .30 - —
Powd., bbls. bxs. lb. .30 - —
Geraniol, extra cns. dms. lb 1.75 2.40
Soap grade, dms lb .90 1.75
Standard, cns., dms. lb. 1.65 —
Synthetic, dms lb 1.30 —
Geranium oil, Algerian, cns. lb.19.00 -22.00
Bourbon, cns. lb.17.00 -19.00
Turkish (see Palmarosa oil).
Geranyl acetate cns lb 1.90 2.70
Synthetic dms lb. 1.45 —
Ginger oil, dist., bots. lb.12.00 -14.00
Ginger oleoresin, NF from African root, bots lb 4.25 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs lb. .19½- —
Jamaican, No. 3, bgs lb. .28 - —
Nigerian, split, bgs lb. .25 - —
Sierra Leone, bgs lb. .35 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid tech. 50% dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., t.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b. works lb. .17 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
135 jellygrams, bgs., c.l, same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, t.c.l. prices 2c higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½- —
150-177, bgs., c.l., dlvd lb. .22½- —
178-206, bgs., c.l., dlvd lb. .25 - —
207-236, bgs., c.l., dlvd. lb. .28 - —
237-266, bgs., c.l., dlvd lb. .30½- —
267-298, bgs., c.l., dlvd lb. .32½- —
299-330, bgs., c.l., dlvd lb. .34½- —
331-362, bgs., c.l., dlvd lb. .36½- —
363-394, bgs., c.l., dlvd lb. .38 - —
395-427, bgs., c.l., dlvd. lb. .40 - —
428-460, bgs., c.l., dlvd lb. .42 - —
461-494, bgs., c.l., dlvd lb. .44 - —
495-529, bgs., c.l., dlvd lb. .46 - —
Hide glue, t.c.l. prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo.150.00 -300.00
Bots., 50-kilo lots kilo.100.00 —
Bots., 500-kilo lots kilo. 75.00 —
Glycerine, dom., nat., crude, saponification 88%, tanks, dlvd, lo. .13½- .14
nat., crude, soapiye 80%, tanks, dlvd lb. .12½- .12¾
nat., refd., USP, CP, 99%, dms., c.l., dlvd. lb. .26⅝- —
dms., t.c.l., dlvd lb. .27⅜- —
tanks, dlvd. lb. .24⅞- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .25¾- —
dms., t.c.l., dlvd. lb. .26½- —
tanks, dlvd. lb. .24 - —
nat., high gravity, dms., c.l., dlvd. lb. .26½- —
dms., t.c.l., dlvd lb. .27¼- —
tanks, dlvd. lb. .24¾- —
Glycerine, dom., refd., syn., 99.5%, dms., c.l., dlvd lb. .26¾- —
dms., t.c.l., dlvd lb. .27½- —
tanks, dlvd. lb. .25 - —
Imp., nat., crude, soapiye, 80%, c.i.f. lb. Nom.
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Graphite, 85-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Graphite, flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd lb. .07¼ Nom.
Yellow, tanks, dlvd lb. .06½- —
Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb. .12½- —
dms., t.c.l., same basis lb. .14½- —
tankcars, same basis lb. .11 - —
Extra winter, strained, dms., c.l., Chicago lb. .15½- —
dms., t.c.l., same basis lb. .17½- —
tankcars, same basis lb. .14 - —
Grease oil, prime, burning, dms., c.l., same basis, Chicago lb. .17½- —
dms., t.c.l., same basis lb. .19½- —
tankcars, same basis lb. .16 - —
Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls lb. .40 —
Guaiacol NF cryst. dms., tins lb 2.10 2.15
liq., cbys., dms lb. 2.30 - 2.40
Guaiacwood oil cns. lb. .63 .80
Guaiacol carbonate NF VII, dms lb 3.40 3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt lb. .38 - —
bgs., t.c.l. same basis lb. .40 - .42
Indust., bgs., c.l., same basis lb. .32 - —
Tech., bgs., c.l., same basis lb. .30 - —

GUMS

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls. c.l., frt. alld., 100% basis lb. 1.00 - —
bbls., t.c.l., same basis lb. 1.05 - —
Hansa yellow 10 G, bbls., dlvd. E. of Rockies lb 2.45 —
Hansa G yellow, pigment, bbls. lb. 2.20 - —
Hawthorn berries, bgs. lb. .18 - .20
Heliotropin, 100-lb lots, dms. lb. 2.60 - 3.40
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls. lb. 1.50 - —
Hemlock oil, cns. lb. 2.55 - 3.00
Henbane leaves, bls lb. .40 - .45
Heptachlor, dms. c.l., t.l., frt. alld., 100% basis lb. .96 - —
Heptane, indust., tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .1625- —
Hesperidin, purif., 50 kilos, f.o.b. works kilo.19.70 - —
Hesperidin methylchalcone, 50 kilos, f.o.b. works kilo.49.25 - —
Hexachlorophene, dms., 1,100 lbs. or more lb 1.84 - —
dms., to 1,100 lbs. lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or New York City lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 - —
bgs., smaller lots, same basis. lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib dms. smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48½
Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston, Texas gal. .16 - —
l-Hexanol, dms., c.l., works lb. .35 - —
dms., t.c.l., works lb. .35¾- —
tanks, works lb. .33 - —
Hexyl cinnamic aldehyde, dms lb. 3.95 - 4.00
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms., t.c.l., works lb. .76 —
Hexyl salicylate, dms. lb. 1.70 1.75
Hexylene glycol, dms., c.l., dlvd lb. .17½- —
dms., t.c.l., dlvd. lb. .19 - —
tanks, dlvd. lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd lb.14.00 - —
dms. smaller lots, dlvd. lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.25 - —
Homatropine methylbromide, USP, bots oz. 3.00 - 3.25
Hoofmeal, 17-18% ammonia bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls. lb. .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85%, 240-lb. dms., c.l., works lb. 1.28 - —
240-lb. dms., t.c.l., works. lb. 1.35 - 1.55
Hydriodic acid, purif., 47%, 2-cbys., f.o.b works lb. 2.92 - —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1 lb. .29¼- —
dms., t.c.l., dlvd. zone 1 lb. .29¾- .30½
tanks, dlvd. zone 1 lb. .27¼- —
Zone 1 for hydroabieyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys. frt equald lb. .48 .56
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys., t.c.l., dlvd. Metropolitan area 100 lbs 2.90 - 3.05
tanks, works, frt. equald ton.28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys., t.c.l., dlvd Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt equald ton.30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys. t.c.l., dlvd Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt equald ton.35.00 - —
Hydrochloric acid CP, USP, consumers, cbys., extra, c.l., works lb. .15¾- —
cbys. t.c.l., same basis lb. .17⅛- .17¾
5-pint bots., extra cs., c.l., same basis lb. .20¾- —
lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. .95 - —
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.00 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works, pint. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).
Hydrofluoric acid, aqueous, 70%, 50-gal. or 30-gal. dms., c.l., t.l., dlvd. 100 lbs.19.98 - —
55-gal. dms., t.c.l., t.t.l., dlvd. 100 lbs.20.75 - —
30-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
30-gal., dms., t.c.l., t.t.l., dlvd. 100 lbs.22.50 - —
tanks, works frt. equald 100 lbs.13.40 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery
Hydrofluosilicic acid, dms., works, 30% basis lb. .07 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., t.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., t.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls., dlvd W lb. .39 - —
tanks, works lb. .18 - —
Hydrogen peroxide, 35%, dms., c.l., dlvd lb. .202 - —
dms., t.c.l., dlvd. lb. .211 - —
tanks, dlvd. lb. .1800- —
Hydroquinone, photo grade, dms., 50-lbs. f.o.b works lb. 1.10 - —
Tech., dms., c.l., dlvd. lb. .82½- —
dms., t.c.l. dlvd lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l. dlvd lb 2.59 - —
dms., t.t.l., dlvd lb. 2.61 - —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago lb. .11 - —
tanks, Belle W. Va lb. .073 - —
Hydroxycitronellal, cns. lb. 5.65 - 6.00
Hydroxyethyl cellulose, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb. .74 - —
fib dms. 2,000 to 19,999-lb. lots, same basis lb. .79 - —
fib dms. 100 to 1,999-lb. lots, basis lb. .83 - —
fib. dms., smaller lots, same lb. .93 - —
(Highest viscosity [15,000 cps.] grade is 10c. per lb. higher.)
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots. oz. 7.75 8.50
Hyoscyamine sulfate, bots oz. 7.75 8.50
Hypophosphorous acid, purif., 50%, 10-cbys. f.o.b works lb. 1.95 - —
NF 50%, 10-cbys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. lb. .75 - 1.03
Indigo (see Dyes, coaltar, 1171 indigo, syn.)
Indole, CP, bots. lb.13.65 -15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd lb. 4.50 - —
50-lb. dms., less than 1,000 lb., dlvd lb 4.75 - —
10 lb cns., 10-50 lbs dlvd lb 5.00 - —
5 lb bots., dlvd lb 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. 1.10 - —
Resub., USP, dms., f.o.b. works.lb. 2.20 - 2.22
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms. 300-lbs., f.o.b. works lb. 4.90 - —
dms., 100-lbs., same basis lb 5.05 - —
a-Ionone, cns. lb. 4.60 - 5.75
b-Ionone, cns lb. 4.15 - 6.15
Ipecac root, whole, bgs lb. 8.00 - 8.50
Powd., bbls., bxs lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .30 - .32
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .60 - —
bbls. t.c.l. ton lots, same basis. lb. .61 - —
bbls., smaller lots, same basis. lb. .62 - —
Dom., reg. bbls., c.l., dlvd. E lb. .55 - —
alkali-resistant, dom., reg., bbls., c.l., ton lots, same basis lb. .56 - —
bbls. t.c.l. smaller lots, same basis lb. .57 - —
Imp., British, reg., bbls. c.l. dlvd. E lb. .48 - —
bbls., t.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont. Wyo. Utah. Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs. t.c.l. works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., t.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05½- —
c.l., works lb. .08¾- —
Iron oxide, red, dom., pure bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., t.c.l. works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., t.c.l., ex dock lb. .06 Nom.
bbls., t.c.l., ex whse, New York, lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¾- .07
Peruvian type, bgs. t.c.l lb. .023 .024
Iron oxide, yellow, pure, light lemon shade bgs. c.l. works lb. .12¼- —
other shades, same basis lb. .12 - .12½
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol, cns. lb. 1.44 - 1.80
Isobornyl acetate, cns. lb. .46 - .56
Isobornyl formate, dms lb. 1.15 - 1.20
Isobornyl propionate, dms lb. 1.20 - 1.25
Isobutyl acetate, perfume grade, cns lb. .30 - .35
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., t.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., t.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Isobutylene, 98% tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., t.c.l., works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., t.c.l., dlvd. lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., t.c.l., dlvd. lb. .23½- —
tanks, dlvd. lb. .19½- —
Isobutyric acid, dms. c.l., t.l., dlvd. lb. .35 - —
dms., t.c.l., t.t.l. same basis lb. .36½- —
t.c. t.t., same basis lb. .33 - —

Isobutyronitrile, dms., c.l., divd. lb. .47½ - —
dms., l.c.l., divd. lb. .48½ - —
tanks, divd. lb. .45 - —
Isoeugenol, cns. lb. 3.10 - 3.40
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 - —
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., divd. E. lb. .20½ - —
dms., l.c.l., divd. E. lb. .22 - —
tanks, divd. E. lb. .18 - —
Isopentane, comi. grade, tanks, f.o.b. Tex. refy gal. .16½ - —
Isophorone, dms., c.l., divd. lb. .24½ - —
dms., l.c.l., divd. lb. .25¼ - —
tanks, divd. lb. .22½ - —
Isophthalic acid, dms., c.l., works, frt. equald lb. .19 - —
dms., l.c.l., same basis lb. .20 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., divd. lb. .14 - —
dms., l.c.l., same basis lb. .15¼ - —
tanks, same basis lb. .11½ - —
Isopropyl alcohol, refd., 91%, dms., c.l., divd gal. .58 - —
dms., l.c.l., divd. gal. .68 - —
tanks, divd gal. .42 - —
95%, c.l., dms., divd gal. .60 - —
dms., l.c.l., divd. gal. .70 - —
tanks, divd gal. .44 - —
Anhyd., c.l., divd gal. .62 - —
dms., l.c.l., divd. gal. .72 - —
tanks, divd gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether dms., c.l., divd lb. .09½ - —
dms., l.c.l., divd. lb. .11 - —
tanks, divd lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l., works lb. 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib dms. c.l., t.l., works lb. .75 - —
450-lb. fib dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid refd. bgs. c.l., f.o.b. works lb. .39½ - —
bgs., l.c.l., same basis lb. .41 - .43
Tech., bgs., c.l., same basis lb. .34½ - —
bgs., 500-lbs. same basis lb. .36 - —

J

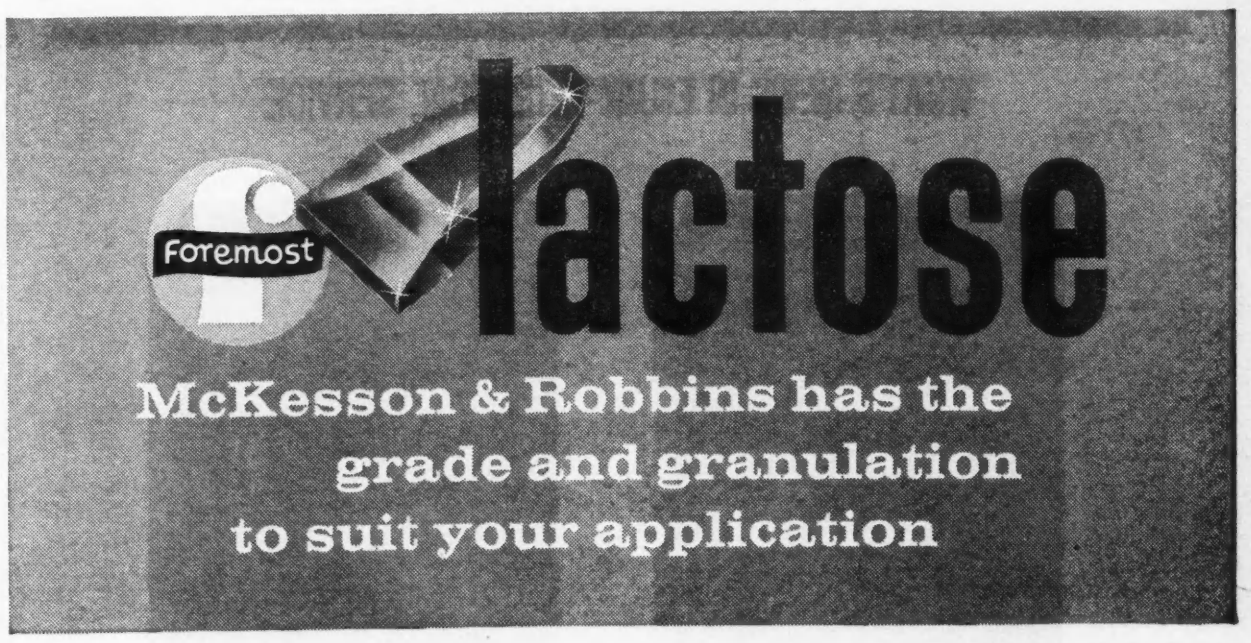
J acid, paste bbls., works, 100% basis lb 2.70 - —
Powd. bbls., same basis lb. 2.75 - —
Jalap root, NF, bls lb. .55 - .60
NF, powd., bbls., bxs lb. .65 - .70
Japan wax, cs. lb. .29 - .31
Juniper berries, bgs. lb. 16 - .17
Juniper berry oil NF, bots. lb. 2.90 - 3.75
Twice rectified, bots. lb. 3.25 - —
Juniper tar oil, NF, dms. lb. .42 - .60
Juniper wood oil, tech, cns. lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin NF, powd., fib. dms lb. .10 - .12
NF colloidal 50-lb. bgs. lb. .15½ - .17½
Karaya gum, No 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .11 - .12

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls., dms., 5 to 19, frt. equald. lb. .2085- —
bbls. dms., 1 to 4, frt. equald. lb .2135- —
80%, bbls., c.l., dms., frt. equald. lb. .3333- —
bbls. dms., 20 or more, frt equald lb. .3385- —
bbls., dms., 5 to 19 frt. equald. lb. .3435- —
bbls., dms., 1 to 4, frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls. 5 to 19 works lb. 2840- —
bbls., 1 to 4, works lb. .2890- —
80%, bbls., c.l., works lb. .4625- —
bbls. 5 to 19, works lb. .4725- —
bbls. 1 to 4, works lb. .4775- —
Tech., 44%, bbls., c.l., works. 100 lbs. 12.45 - —
bbls., l.c.l., works 100 lbs. 12.85 - —
USP 85% cbys. lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt. equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. .14½ - —
bgs., 2,000-lb lots, frt equald lb. .14¾ - —
bgs., 200-lb lots, frt. equald lb. .15¼ - —
Edible lactose in fib dms., ½c. higher.
Lactose, ferment. grade, bgs., c.l., works lb. .06¾ - —
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald. lb. .21½ - —
fib. dms. 2,000-lb. lots frt. equald lb. .22¼ - —
200-1,880-lb. lots, frt. equald lb. .22¼ - —
USP lactose in bags ½c to 1c lower.
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .18½ - —
bgs., l.c.l., frt. equald lb. .19 - .19¾
Lady's slipper root, bls lb. 3.00 - 3.50
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 - .26
USP, annyd., cosmetic, 400-lb. dms., works lb. .26 - .30
USP, hydrous, 400-lb dms., works lb. .20 - —
Lard, cash, dms., Chicago lb. .10¾ - —
Lard oil (see Grease oil).
Larkspur seed bgs. lb. .55 - —
Laurel leaf oil dms. cns. lb 9.75 - 12.50
Laurent's acid, bbls lb. .67 - —
Lauric acid, pure, dms. lb. .30¼ - .32¼
bags lb. .28¾ - .31¼
tanks lb. .27¼ - —
Lauryl alcohol, bots. lb. 3.00 - 8.00
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .63½ - —
dms., l.c.l., works lb. .66 - —
Lavandin oil, 22-24%, dms. lb. 1.15 - —
Abrial, dms. lb. 1.20 - —
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. lb. .20 - .25
Select., bls. lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester, cns. lb. 3.50 - 3.65
Spike, Spanish, cns lb. 1.75 - 2.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½ - —
White, cryst., bbls. lb. .25½ - —
gran., bbls. lb. .26½ - —
powd., bbls. lb. .26½ - —
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld on $150 or more lb. .30½ - —
1-lb bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, 400-lb. fib. dms lb. .56 - —
Lead iodide, NF, V lars lb 3.82 - —
Lead linoleate, fused, 26.5% Pb, dms. lb. .38 - —
Lead metal, prime, pigs, New York. lb. .11 - —
St. Louis lb. .1080- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., divd lb. .19½ - —
24% Pb., dms., divd. lb. .24¼ - —
Solid, 37% Pb., dms., divd. lb .31¾ - —
Lead nitrate, tech., cryst., 400-lb. fib. dms. lb. .3675- —
Lead orthosilicate gel., 50-60% PbO_2, dms., works lb. .33¾ - .34¼
Lead peroxide, tech. powd., bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works lb. .41 - —
Lead, red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. equald. lb. .1375- —
bbls., l.c.l., same basis lb. .1475- —
97% Pb_3O_4, bbls., c.l., same basis lb. .1395- —
bbls., l.c.l., same basis lb. .1495- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1410- —
bbls., l.c.l., same basis lb. .1510- —
Lead, resinate, precip., 23%Pb, dms., lb. .49 - —
Lead salicylate, normal dms., works lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate liq., 16% Pb, dms lb. .17¼ - —
24% Pb, dms lb. .21¼ - —
Solid, 30% Pb, dms lb. .26¾ - —
Lead white, basic carbonate, bgs., c.l. shipt pt., frt. alld lb. .18 - —
bgs l.c.l. same basis lb. .19 - —
Basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½ - —
bgs., l.c.l., same basis lb. .17½ - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works kilo. 14.20 - —
Lemon oil, USP, Calif., cns., dms lb. 2.45 - 3.00
Messina, cns lb. 4.00 - 6.50
Lemongrass oil, cns., dms lb. 2.60 - 2.75
dl-Leucine, dms., 1 kilo, works kilo. 50.00 - —
Licorice root, gran., bls lb 13 - —
Powd. bls. lb 15 .16
Whole bls. lb .09 .10
Lignaloe wood oil, Mexican, cns. lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)
Lilac oil lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs. works, E ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
spray, bgs., c.l. same basis ton. 18.25 - —
For New York delivery, add $6.29 freight charge
Lime oil, dist., Mexican, dms lb. 5.50 - 6.00
West Indian, dms lb. 5.50 - 6.00
Expressed, West Indian, dms lb. 6.50 - 7.75
Lime salts (see Calcium).



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Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).			
Linalool, ex bois de rose oil, dms	lb	2.45	4.25
Syn., 98-100% dms., works	lb	2.40	2.75
Linalyl acetate ex bois de rose 90-92%, dms	lb	2.65	4.50
96-98%, dms	lb	3.25	—
Syn., 98-100%, dms., works	lb	2.75	—
Lindane, 25% formulation, to distributors, dms, frt alld	lb	1.35	1.50
99%, tech, to formulators, 250-lb. dms., 5,000 lbs., dlvd	lb	2.13	—
100-lb dms, 5,000-lbs, dlvd	lb	2.15	—
250-lb dms, less than 5,000-lbs., dlvd	lb	2.18	—
100-lb dms, less than 5,000-lbs, dlvd	lb	2.20	—
Linden flowers, with leaves bls	lb	35	40
Without leaves bls	lb	42	45
Linseed meal, expeller, 32%, bulk, Minneapolis, mills	ton	56.50	—
Extracted, 34%, bulk, same basis	ton	49.50	—
Linseed oil, raw, dms., c.l., New York	lb.	.1700-	—
dms., l.c.l., New York	lb.	.1790-	.1840
tanks, f.o.b. Minneapolis	lb.	.1340-	—
tanks, New York	lb.	.1452-	—
tankwagon, New York	lb.	.1475-	—
Boiled linseed oil, .006c. per lb higher.			
Linseed oil acid, dist., dms.	lb.	.2075-	.2325
Water white, dms.	lb.	.2425-	.2675
Litharge, coml., powd. bbls., c.l., works, frt. equald	lb.	.1325-	—
bbls., l.c.l., same basis	lb.	.1425-	—
Lithium aluminum hydride, lump, dms., works	lb.	33.00	39.00
Lithium benzoate, dms.	lb	1.65	1.67
Lithium bromide, NF, gran., bgs., works, frt equald	lb	2.60	—
Lithium carbonate, NF, dms., ton lots	lb.	.58	—
dms., 1,999 lbs. or less	lb.	.64	—
Tech., dms., ton lots	lb.	.57	—
dms., 1,999 lbs. or less	lb.	.63	—
Lithium chloride CP, annyd., dms., ton lots	lb.	1.23½-	—
Tech. anhyd. dms., c.l., t.l., dlvd. or works frt alld	lb.	.87	—
dms. l.c.l. same basis	lb.	.88	.92
Lithium citrate NF dms. ton lots.	lb	1.50	—
Lithium fluoride, dms., 20,000-lb. lots, dlvd	lb.	1.75	—
bbls., ton lots and more, dlvd	lb.	1.85	—
bbls., less ton lots, dlvd	lb.	1.90	—
Lithium hydride, powd., dms., 500-lbs lots or more, works.	lb.	9.50	—
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld	lb.	.60	—
dms., l.c.l., frt, alld	lb.	.64	—
Lithium manganite, dms. works	lb.	.93	1.05
Lithium nitrate, tech. dms., 100-lb lots	lb	1.15	1.25
Lithium salicylate, dms.	lb	1.60	1.70
Lithium silicate, dms., works	lb.	1.10	1.20
Lithium stearate, dms., c.l., works	lb.	.47½-	—
dms., ton lots, works	lb.	.48½-	—
dms., less-ton lots, works	lb.	.53½-	—
Lithium sulfate, dms., 100-lb. lots	lb.	1.15	1.25
Lithium titanate, dms., works	lb.	1.15	1.25
Lithol red toner, barium, bbls., works	lb.	1.03	—
Lithol-rubine red toner, pure, bbls., works	lb.	1.65	—
Resinated, bbls., works	lb.	1.47	—
Lithopone, ord. bgs., c.l., dlvd. E	lb.	.08½-	—
bgs., l.c.l., dlvd. E	lb.	.09½-	—
Titanated (high-strength), bgs., c.l., dlvd	lb.	.11	—
bgs., l.c.l. dlvd.	lb.	.12	—
Lobelia herb, bls	lb.	.95	1.10
Lobeline sulfate, bots., 50-oz. lots, works	oz.	30.00	—
Locust bean gum powd., bgs.	lb.	.35	.48
Lycododium, cs.	lb.	2.50	3.00
1-Lysine monohydrochloride, 25-lb. dms	lb.	4.95	—

Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points

M

Mace, Siauw, No. 1, bls	lb.	1.35	—
No. 2, whole, bls	lb.	1.25	—
siftings, bls.	lb.	1.15	—
Mace oil, dist., cns., dms	lb.	9.00	11.00
Magnesia, calcined, tech., bgs., cns., frt equald	lb.	.25¾-	.26½
Tech, syn., rubber grade, light, bgs., c.l., frt. equald	lb	.28¾-	.30
rubber grade, extra light, bgs., c.l., frt. equald	lb.	.28	—
bgs. l.c.l., frt. equald	lb.	.28¾-	—

Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points

Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Lunning, Nev.	ton.	39.50	—
91%, bgs., c.l., same basis	ton.	49.50	—
95%, bgs., c.l. same basis	ton.	59.00	—
USP, light, bgs.	lb.	.36½-	.37½
USP, heavy, bgs.	lb.	.36½-	.37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald	ton.	86.25	—
Deadburnt, standard grain, bulk, c.l., Chawelah, Wash.	ton.	46.00	—
Magnesium bromide, 50-lb. dm., f.o.b. works	lb.	1.15	—
Magnesium carbonate, tech., bgs., c.l., frt. equald	lb.	.11	—
bgs., t.l., frt. equald	lb.	.11½-	—
bgs., l.c.l., frt. equald	lb.	.13½-	.14
USP, bgs., c.l., frt. equald	lb.	.13½-	—
ogs., t.l., frt equald	lb.	.14	—
bgs., l.c.l., frt. equald	lb.	.15	16

Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.

Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l., works	lb.	.12¾-	—
dms. l.c.l., works	lb.	.14	.15
hydrous, 99%, flake, bgs., c.l., works	ton.	60.00	—
bgs., l.c.l., works	ton.	75.00	-100.00
Magnesium gluconate 100-lb. dm., f.o.b. works, E	lb.	1.42	—
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works	lb.	.24½-	.35½
Magnesium lauryl sulfate, dms., c.l., frt. alld	lb.	.22½-	—
dms., l.t.l., frt alld.	lb.	.23½-	—
tanks, frt. alld.	lb.	.21½-	—
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works	lb	.36	—
pigs., 10,000-lb. lots or more, works	lb.	.35¼-	—
sticks, cs., works, same basis	lb.	.59	—
Magnesium nitrate, cryst., dms., works	lb.	.29	—
Magnesium oxide (see Magnesia, calcined).			
Magnesium phosphate, tribasic, NF, bbls	lb.	.75	—
Magnesium silicate (see Talc).			
Magnesium silicofluoride, dms., works	lb	.10½-	.13
Magnesium sulfate, tech., bgs., c.l., works	100 lbs.	2.15	—
bgs, l.c.l., works	100 lbs.	2.90	3.15
USP, cryst., bgs., c.l., works, 100 lbs.		2.35	—
bgs., l.c.l., 5,000 lbs., 1 withdrawal	100 lbs.	3.10	—
bgs., smaller lots	100 lbs.	3.35	—
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots	lb.	.38	—
fib. dms., 1,000-lb. lots	lb.	.40	—
fib. dms., 100-lb. lots	lb.	.45	—
Bulky and super grades of magnesium trisilicate 7c. per lb. higher.			
Malachite green, straight, PTA, bbls., works	lb.	5.30	—
Malathion, dms., c.l., works	lb.	.89	—
dms., l.c.l., works	lb.	.92	1.01
Maleic acid, cryst., powd., dms	lb.	.37¼-	—
Maleic anhydride, dms., c.l., frt. equald	lb.	.24	—
dms., l.c.l., frt. equald	lb.	.25½-	—
tanks, frt equald	lb.	.22½-	—
Maleic anhydride in bags ½c. per lb. less.			
Malic acid, tech., dms	lb.	.50	—
Mandelic acid, NF, dms., 1,000-lb. lots	lb.	2.35	—
dms., smaller lots	lb.	2.40	2.50
Mandrake root, bls	lb.	.45	—
Manganese acetate, dms., dlvd	lb.	.35	—
Manganese borate, tech., fib. dms.	lb.	.23½-	—
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works	lb.	.11	.16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works	lb.	.21¾-	—
smaller lots, works	lb.	.23½-	—
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works	ton.	148.00	—
40,000 to 99,999-lb. lots, paper bgs., same basis	ton.	144.50	—
40,000 to 99,999-lb. lots, dms. same basis	ton.	152.50	—
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.			
Manganese gluconate, dms	lb.	1.84	—
Manganese hydrate, dms., dlvd	lb.	.35	—
Manganese hypophosphite, NF, dms.	lb.	3.52	—
Manganese linoleate, liq., 4.35% Mn, dms	lb.	.35¾-	—
Solid, precip., 8.2% Mn, bbls	lb.	.41¼-	—
Manganese metal, electrolytic, dms., c.l., dlvd. E	lb.	.34½-	—
dms., ton lots, dlvd. E	lb.	.37	—
dms., smaller lots, dlvd E	lb.	.39	—
Manganese naphthenate, liq., 6% Mn, dms., frt. alld	lb.	.29¾-	—
Manganese resinate, fused, 3½% Mn, dms	lb	29¼-	—
Precip., 6½-7% Mn, dms.	lb.	.42	—
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S., E	ton.	86.50	—
bgs., l.c.l., dlvd. S., E	ton.	93.50	—
Manganese tallate 6% dms.	lb.	.26½-	—
Manila copal gum, C, bgs	lb.	.35	.39
DBB, bgs.	lb.	.24½-	.28
DK, dust, bgs.	lb.	.14	Nom.
MA, soft, bgs.	lb.	.20	.24
WS, bgs	lb.	No stocks.	
Mannitol, com'l, fib dms., ton lots, works	lb.	.60	—
fib. dms., to ton lots, works	lb.	.62	—
fib. dms., single dm., works	lb.	.65	—
Marine pitch, dms	lb.	.04¼-	.05
MBTS (see Mercaptobenzothiazyl disulfide).			
MBT (see 2-Mercaptobenzothiazole).			
Melamine, bgs., c.l., works	lb.	.26½-	—
bgs., l.c.l., works	lb.	.28	—
Menadione, USP bots.	gram.	.044	.05
Menhaden oil, crude, tanks, works, Atl. & Gulf ports	lb.	.06¾-	—
Menthol, nat., USP, Brazilian, large crystals, cs	lb.	8.10	—
Nat., USP, Brazilian, regular crystals, cs	lb.	8.00	—
Japanese, cs.	lb.	10.50	12.00
Syn., USP, racemic, 25-lb. lots	lb.	4.25	—
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld	lb.	.44	—
bgs. fib. dms., less ton lots, same basis	lb.	.46	—
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld	lb.	.84	—
bgs. fib. dms., less ton lots, same basis	lb.	.86	—

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U.S.I. CHEMICAL NEWS

June ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1961

NH_3 and H_2 are Keys to New Chemical Process For Refining Copper Ore

A low-capacity (42 tons/day), low-investment plant for refining copper ore by chemical means is now under construction in the Philippine Islands. The plant will employ a new, all-chemical process to convert low-grade ores to high-grade (99.95% pure) metal. It will eliminate expensive smelting and refining procedures. Air and stream pollution is expected to be negligible.

In the process, the ore—concentrated by the usual crushing and flotation methods—is subjected to an ammonia leach under 125 psi pressure. Copper and zinc dissolve. Sulfur and iron are removed as a residue. The copper-zinc solution is distilled, and excess ammonia recovered in this step is recycled. The solution of metals goes through oxydrolysis to reduction with hydrogen. Pure copper powder results, which is compacted into wire or sheet. All sulfur is converted to ammonium sulfate for use as fertilizer.

The process is said to be easy to control, to require little electric power, and to be low in operating cost.

Ether to Meet New, Tighter ACS Specs Being Produced by New U.S.I. Refining Unit

New Unit at Tuscola, Ill. Increases Versatility of U.S.I. Ether Facilities

A new ethyl ether unit has just gone on stream at U.S.I.'s alcohol-ether plant in Tuscola, Illinois. Ether processed through the refining unit meets the new, more stringent specifications recently published by the American Chemical Society. In addition to requiring freedom from foreign odor, the new specifications for ethyl ether, ACS absolute, contain these tighter requirements:

- lower peroxide content (as H_2O_2) from 0.001% maximum to 0.0001% maximum.
- specifies aldehyde content (as H_2CO) as 0.0005% maximum, rather than "to pass test".
- lower water content from 0.05% maximum to 0.01% maximum.

All other specifications for absolute ether have remained unchanged. These include density, acidity, non-volatile matter, alcohol content, and substances darkened by sulfuric acid.

Copies of the complete "Reagent Chemicals" which contains these specifications and test procedures are available from the American Chemical Society, 1155 Sixteenth St., N.W., Washington, D.C.

The new refining unit is designed to produce ether that is superior for Grignard and lithium aluminum hydride reactions.

Greater Production Versatility

The new unit is another step by U.S.I. in its program to increase the versatility of its alcohol-ether production facilities. In April 1960, it was reported in the U.S.I. Chemical News that the company had added

MORE

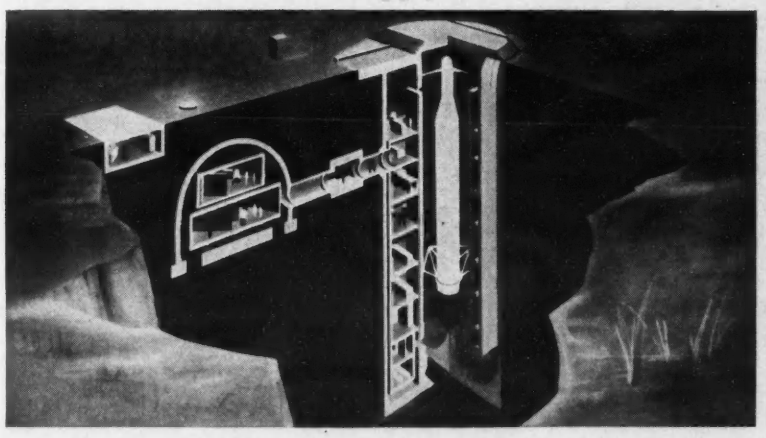
Cesium Is Propellant In Prototype Ion Engine

A small model of an ion propulsion engine employing cesium as the propellant is nearly ready to fly, according to a recent article on electrical propulsion engines for spaceships. The prototype, developed for the Air Force, produces a thrust in the range of several ten-thousandths of a pound.

The ion propulsion, or electrostatic engine accelerates a beam of positive cesium ions by means of an electrostatic

MORE

DIMAZINE® (UDMH) Plant Expanded To Supply More Fuel for Titan II



Artist's cutaway conception of a typical TITAN underground launch site. Use of storable liquid propellants permits missile to be kept fully fueled—ready for launch directly from silo.

New facilities to produce unsymmetrical dimethylhydrazine (UDMH) for the Titan II missile have just been completed. This high-energy, storable liquid rocket fuel will help reduce the Titan II's launching time to seconds and give the U.S. an added deterrent in its defense arsenal.

The new plant, a joint venture of U.S.I. and Food Machinery and Chemical Corp. is located in Baltimore and will produce multi-million pound quantities of UDMH. This fuel is also being considered for use in other military and space vehicles in addition to its key role in the Titan program.

Polyethylene Pipe Gets OK from New York City for Chemical Waste Systems

For the first time, the New York City Board of Standards and Appeals has approved polyethylene pipe and fittings for acid and chemical waste systems. The approved drainlines, made by a Rochester, N. Y. company, are now also acceptable to Buffalo, Cincinnati, Detroit, Los Angeles, the State Plumbing Code of Michigan and the Plumbers' Examining Board of Richmond, Virginia.

June ★ **U.S.I. CHEMICAL NEWS** ★

CONTINUED *Ether*

an ether hydration unit to the ethyl alcohol plant at Tuscola. That unit made it possible for U.S.I. to take part of its ether and convert it back to alcohol.

The company consequently has a flexible means of keeping alcohol and ether production in balance, and can better serve changing market needs without the limitations imposed by rigid manufacturing facilities.

In addition to producing ACS absolute ethyl ether, U.S.I. produces ether to meet USP specifications for institutional and laboratory use and Technical Refined ether for industrial applications.

New Polyethylene-Copper Bonding Method Gives Highest Bond Strength Yet

A new process for bonding polyethylene to copper, to alloys containing at least 85% copper, or to copper-plated metals, is reported to give bond strengths of 20 to 40 lb./in. of width. Previously-used methods are said to have given strengths of only 5 to 10 lb./in. of width.

In the new process, developed by Bell Telephone Laboratories, the metal surface is treated with a special oxidizing agent to form a cupric oxide layer. Polyethylene is then molded directly to the oxide coating, at elevated temperatures and pressures, without the use of adhesives. No treatment of any kind is applied to the polyethylene surface proper. The oxide is said to produce a high polarity at the polyethylene surface which greatly increases adhesion between metal and plastic.

Successful bonds have been achieved with copper, beryllium copper, and phosphor bronze, it is stated. The process is said to be under consideration for submarine cables, printed circuits, microwave devices and structural panels.

Have You the Latest Ethyl Alcohol Regulations?

A&TTD's latest regulations on the distribution and use of specially denatured and tax-free alcohols are now available from U.S.I. Request copies on company letterhead. Write Technical Literature Dept., U.S.I. Chemical News, 99 Park Ave., New York 16, N. Y.

Superconductor Magnet Has Core of Niobium-Tin Wire

Wire formed from an alloy of three parts niobium and one part tin has made possible the development of a superconductor magnet.

Most materials that exhibit superconductivity don't retain it in strong magnetic fields. This wire, reportedly, is capable of generating magnetic fields up to 88,000 gausses without losing its superconductivity.

The novel magnet can produce very strong fields from very small quantities of electric power. Because the wire is superconductive, power is required only to start the flow and operate the refrigeration equipment needed.

CONTINUED *Cesium*

field. Cesium is the "fuel" of choice because it is easily ionized by moderate heating and offers sufficient mass to be effective.

Rocket engineers measure propellant economy in terms of specific impulse—the ratio of thrust produced to the rate of mass (fuel) consumed. Ion propulsion systems can reportedly develop specific impulses of 5,000 to 100,000, lb-sec/lb while the best chemical propellants produce a specific impulse of about 300 lb-sec/lb.

Cesium metal, 99% pure, is now available in commercial quantities from U.S.I.

TECHNICAL DEVELOPMENTS

Information about manufacturers of items may be obtained by writing

Hexanitroethane, hydrazinium nitroforma nitromethane and similar chemicals ar being synthesized on a custom basis for of government research contracts on rock pellants.

A 10-stage, fully automatic glassware has been developed for labs, research pharmaceutical houses, etc. where large tities of glassware must be cleaned dail to require an operator only part time. N

New 24 Kt neutral immersion gold can obtained. Claimed to give fast, economica sition of thin plates of gold directly on per, brass, nickel, iron, lead and solder without use of anodes or currents. N

New polyethylene bottles, with unusuall mouths to facilitate filling and dispensi now available in sizes from 50-2,000 cc. with leak-proof, tight-fitting polyethylene caps, scalloped for easy removal. N

Corrosion inhibitor to protect low make-up cooling and heating systems is subject six-page bulletin. Said to produce protect on all exposed metal surfaces. Compatib alcohol and glycol antifreezes. N

Portable gas detector now on market is accurate, sensitive. Consists of volumetric detector tubes hermetically sealed in lea ders, remote sampling device. Detector available for 36 different gases. N

Silicone uses in aerospace industry is su new brochure. Relates value of silicones ous applications to properties such as heat protection, low temperature flexibilit electrical properties, resistance to ozone, weathering, thermal shock. N

New, magnet-actuated, miniature air sw use in totally pneumatic circuits is descr bulletin giving specifications, features, series, fields of application. Recommend explosion hazard environments. N

Powdered alkaline product for spray wash ing of steel, copper, brass, aluminum, ha introduced. Formulated for maximum dete minimum foaming. Inhibits steel from prevents scale formation on coils, etc. N

Mathematical handbook for scientists an neers now being sold. Gives definitions, fo theorems, methods. Includes detailed references and bibliographies. N

PRODUCTS OF U.S.I.

Organic Solvents and Intermediates: Normal Butyl Alcohol, Amyl Alcohol, Fusel Oil, Ethyl Acetate, Normal Butyl Acetate, DIATOL®, Ethyl Ether, Acetone, Ethyl Chloroformate, Ethylene, Sodium Ethylate, Urethan U.S.P. (Ethyl Carbamate).

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Urethan USP, Intermediates.

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Heavy Chemicals: Anhydrous Ammonia, Ammonium Nitrate, Nitric Acid, Ni gen Fertilizer Solutions, Phosphatic Fertilizer Solution, Sulfuric Acid, Ca Soda, Chlorine, Sodium Peroxide, Metallic Sodium.

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Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b. works lb. 4.03 • —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 3.78 • —
Mercuric cyanide, NF VIII, powd., fib. dms lb. 5.84 • —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works lb. 6.97 • —
Mercuric oxide, red, NF IX, 50-lb. dm., 100 lbs. f.o.b. works. lb. 4.72 • —
tech., 50-lb. dm., 100 lbs., same basis lb. 4.52 • —
yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 4.89 • —
tech., dms., 100 lbs lb. 4.35 • —
25-lb. fib. dm. lb. 4.38 • —
Mercurous chloride (see Calomel).
Mercury, ammoniated (see White precipitate USP XV).
Mercury metal 76 lbs. per flask, net-flask 200.00 -202.00
Mesityl oxide, dms., c.l., dlvd lb. .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 • .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid, glacial 98%, dms., truckloads frt. equald lb. .42½- —
dms. smaller lots, frt. equald. lb. .43 • .75
tanks, works, frt. equald lb. .40 • —
Methanol, nat, denaturing grade, tanks, frt alld gal. .33 • —
Syn., zone 1, dms., c.l., or t.l. min. dlvd gal. .51½- —
dms. l.c.l. dlvd gal. .61½- —
Syn., tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 • —
tankwagon, 4,000 gal. min., dlvd gal. .30 • —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 • —
Syn., zone 2, dms., c.l., t.l., min., frt. alld. or dlvd. gal. .55½- —
dms. l.c.l. works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 • —
tanks, 4,000 gal. min., dlvd. gal. .34 • —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 • —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 • —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt alld. lb. 1.10 • —
dms., t.t.l., same basis lb. 1.16 • —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb. 3.50 • —
Feed grade, 98% fib dms., same basis lb. 1.43 • —
Methoxychlor 50% wettable powder, dealers, dms., cs lb. .66 • —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret. dms., l.c.l., same basis lb. .22 • .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis, lb. .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat. dms., l.c.l., E. of Miss. frt alld gal. .62½- —
Syn., dms., c.l., frt. alld. E. gal. .66 • —
dms., l.c.l., frt. alld. E. gal. .76 • —
tanks frt alld E. gal. .51 —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .35¼- —
dms., l.t.l., dlvd lb. .36¼- —
tanks, dlvd. lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E. lb. .17 • —
dms., l.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 • —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99¼- —
dms., l.c.l., same basis lb. 2.00 • —
N-Methylaniline, tech., tanks, frt. alld lb. .60 • —
Methylanthranilate, cns. lb. 2.20 • 2.70
Methyl benzoate, cns., dms. lb. .60 • .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 • .72
on 100 lbs lb. .73 • .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 • —
50-lb. bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 • —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld. lb. .69 • —
50-lb. bgs. 2,000-lb. lots and more, same basis lb. .76 • —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¼- —
Refrigerator mfgs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb. .67¾ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 • —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
5-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 • —
dms., l.c.l., works lb. .45¾- —
tanks, works lb. .43 • —
Methyl formate, refd., dms lb. .35 • .40
Tech., non-ret. dms., any quantity, works lb. .10 • —
tanks, works lb. .07 • —

a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .26 • —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works. lb. .27 • —
100-lb. multiwall paper bgs., l.t.l., works lb. .28 • —
Methyl heptin carbonate, bots. lb. 27.25 -29.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 • 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 • —
dms., l.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 • —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va lb. .31 • —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 • —
Methyl naphthyl ketone, cryst., cns lb. 2.45 • 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 • —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms. lb. 6.90 • —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., l.c.l., same basis lb. .62½- .67½

Methyl testosterone, USP, 100-gram bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.32 • —
5-39 dm. lots, same basis lb. 1.37 • —
tanks, same basis lb. 1.27 • —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.95 • —
Tungstated, PTMA, bbls., same basis lb. 4.35 • —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, NF, crystals, 100-lbs., frt. equald lb. 4.10 • —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .12¼- —
dms., l.c.l., t.l. dlvd lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .11¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb .90 • —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 • —
roofing, 20 to 80 mesh, works lb. .03 • —
wet-grd., biotite, bgs., c.l., works, frt. alld.E lb. .06¼- —
bgs., l.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld E. lb. .06¼- —
bgs., l.c.l., ex-whse or freight alld. E lb. .09 • —

Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 • —
bgs., l.c.l., ex-whse, or frt. alld. E lb. .08¾ —
wallpaper, bgs., c.l., works, frt. alld.E lb. .08¾- —
bgs., ex-whse or frt. alld E. lb. .09 —
white, 5-10 microns, bgs., c.l., works, frt. alld E lb. .08¼ —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 .11
laminating grades, tankcars, works lb. .11 .13
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white tech., 50-65 vis., non-ret. dms., c.l., t.o.b. refy gal. .70 • —
non-ret. dms., l.c.l., same basis gal. .73 • —
tankcars, refy. gal. .54 • —
65-75 vis., non-ret. dms., c.l., same basis gal. .70½- —
non-ret. dms., l.c.l., same basis gal. .73½- —
tankcars, refy. gal. .54½- —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .71 • —
non-ret. dms., l.c.l., same basis gal. .76 • —
tankcars, refy. gal. .55 • —

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Mineral oil, NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., l.c.l., same basis gal. .82 - —
tankcars, refy. gal. .61 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .83 - —
non-ret. dms., l.c.l., same basis gal. .86 - —
tankcars, refy. gal. .67 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .85 - —
non-ret. dms., l.c.l., same basis gal. .90 - —
tankcars, same basis gal. .69 - —
200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .875 - .90
non-ret. dms., l.c.l., same basis gal. .925 - —
tankcars, refy. gal. .69 - .715
340-350 vis., non-ret. dms., c.l., f.o.b. refy. gal. .92½- —
non-ret. dms., l.c.l. gal. .97½- —
tankcars, refy. gal. .76½- —
(For dlvd. N.Y. prices add 2c. for c.l. and 3c. for l.c.l.).
Mineral orange, American, bbls., c.l., works lb. .16 - —
bbls., l.c.l., same basis lb. .17 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —

Mineral spirits, petroleum, regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston, Texas gal. .17 - —
Mink oil, dms. lb. 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .14½- —
tanks, New York gal. .15½- .16
Molybdated orange, bbls. lb. .49 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech., chemical, dms., works, basis Mo content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 84%, dms., works. lb. 1.08 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½- —
dms., l.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —

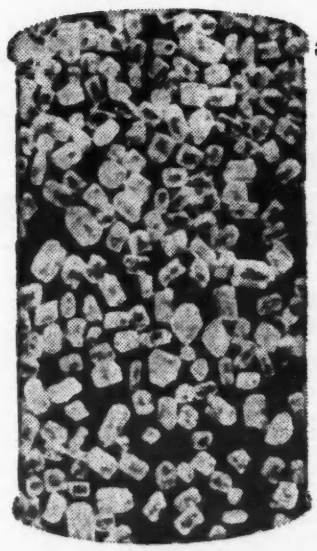
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .52 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½- —
dms., l.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monochlorobenzene prices in the West 1¼c. higher.
Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see n-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous solution, dms., c.l., dlvd. E, 100% basis lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis, lb. .40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)
Monoisopropanolamine, dms., c.l., dlvd. E. lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 - —
tanks, 100% basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .26 - —

Monomethylamine, 30-35% soln., dms., l.c.l., frt. equald., 100% basis lb. .26½- —
tanks, frt. equald., 100% basis lb. .25 - —
60% soln., dms., frt. equald., 100% basis lb. .33 - —
dms., l.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis lb. .26 - —
Monopentaerythritol, tech. bgs., c.l., dlvd lb. .29 - —
bgs., l.c.l. lb. .30 - —
Monopotassium glutamate, dms., 1,000-lb lots, frt alld lb. 3.05 - —
dms. 100-lb lots, same basis lb. 3.25 - —
Monosodium glutamate, dms., dlvd. lb. 1.07 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs lb. .27 - .28
Imp., crude, Bohemian, bgs lb. .25 - .26
German, bgs. lb. .25 - .26
Morphine, cns., 100-oz., f.o.b. works, oz. 12.35 - —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morpholine, dms., c.l., dlvd. E lb. .55¼- —
dms., l.c.l., dlvd. E lb. .56¾- —
tanks, dlvd E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb lots lb. 4.40 4.90
cns., 25-lb lots lb. 4.50 5.00
Ketone fib. dms., 100-lb. lots lb. 4.60 - 5.10
cns., 25-lb. lots lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.26 - —
cns., 25-lb lots lb. 1.40 - —
Mustard seed, Danish, yellow, bgs. lb. .08 - —
Montana, yellow, bgs lb. .10½- —
Oriental, bgs. lb. .09 - —
Mustard, oil, syn., bots. lb. 1.60 1.85
Myristic acid, bgs. lb. .23¼- .25¾
tanks lb. .22¼- —
Myrrh gum, cs. lb. .65 - .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .06¼- .06⅛
Refd., indust., chipped, crushed, bgs., frt. equald lb. .14½- —
tanks, same basis lb. .11¾- —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs., 50 lbs., c.l. same basis, lb. .15¾- —
1-lb. pkgs., c.l., same basis, lb. .18½- —
a-Naphthol, dms., frt. alld lb. 1.02 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .34 - —
bbls., l.c.l., works lb. .36 - —
Naphthol, ITR, red toner, bbls., works lb. 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld lb. .52 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms. lb. 8.50 - —
Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test, dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .18 - —
fib. dms. 100-999-gram lots, basis activity gram. .25 - —
Tech., fib. dms gram. .13½- —
Neopentylglycol, dms., c.l., dlvd lb. .32 - —
dms., l.c.l., same basis lb. .33 - —
Nerol, dms. lb. 4.75 - —
Neroli oil, NF, French, bots. lb. 425.00 - 575.00
Tunisian, bots. lb. 400.00 - —
Nerolin, cns. lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.50 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .68½- .75½
Nickel carbonate, bbls., dlvd lb. 78¼- .85⅛
Nickel chloride, bbls., dlvd. lb. .37 - .41
Nickel formate, bbls., top lots, frt. alld lb. .72 - .73
Nickel metal, electro cathodes, cs., works lb .74 - —
Nickel nitrate, dms., frt. alld lb. .31½- .33½
Nickel oxide, black, bbls. lb. .85 - —
Green, bbls. lb. .84 - —
Nickel sulfate, bgs., c.l., dlvd. lb. .28 - —
bgs., l.c.l., dlvd. lb. .28½- .36
Nicotinamide, USP, 50-kilo, dms., 100 kilos., dlvd kilo. 5.75 - 6.50
dms., less than 100 kilos, dlvd. kilo. 6.25 - 7.00
Nicotinamide hydrochloride, 50-kilo dms., dlvd kilo. 6.50 - 7.50
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld lb. 1.20 - —
40%, manufacturers, 500-lb. dms., frt. alld lb. 1.05 - —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .10¼- —
Nikethamide, cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 - —
cbys., l.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 —
cbys., l.c.l., works E 100 lbs. 6.55 7.35
40° Be., cbys., c.l., works E 100 lbs. 6.75 - —
cbys., l.c.l., works E 100 lbs. 7.05 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 —
cbys., l.c.l., works E 100 lbs. 7.55 8.35
58.5 to 60% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94⅛ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —

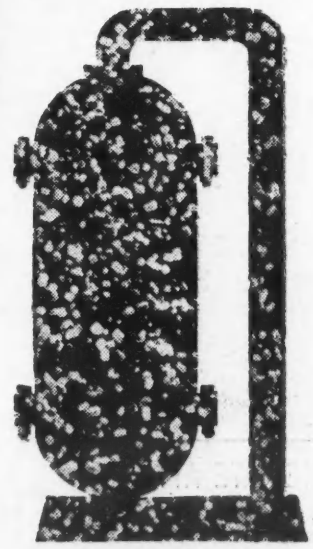
Oxalic Acid
from GENERAL CHEMICAL



3X

LARGE CRYSTAL
for radiator cleaners, wood bleaches

...OR FINE CRYSTAL
for process use



2X

Your best buy...here's why:

Unvarying purity. Always assays a minimum of 99.6% $C_2H_2O_4 \cdot 2H_2O$.

Uniform crystal size. Flows more freely, has less tendency to form agglomerates, gives better performance.

Top-quality appearance. Clear, colorless crystals always have exceptional sparkle and top-quality look.

Special requirements. We'll be pleased to discuss your requirements for special quality oxalic or custom screen sizes.

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General Chemical Oxalic Acid is available in easy-to-use 100-lb. bags and 400-lb. fibre drums. For samples and further information, call your nearest General Chemical office.

Allied Chemical

GENERAL CHEMICAL DIVISION
40 Rector Street, New York 6, N.Y.

Nitric acid, CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, l.c.l., works lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots., extra, cs., l.c.l., same basis lb. .24 .25
dms., frt. alld lb. .99 - —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 - —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms., frt. alld., 100% basis 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 - —
dms., t.t.l., frt. alld lb. .51 - —
o-Nitroaniline orange toner, kgs. lb. 1.50 - —
p-Nitroaniline, c.l., t.l., dms., 20,000 lb. min., dlvd lb. .44½- —
dms., l.c.l., same basis lb. .46½- —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl dist., dms., c.l., frt. alld lb. .13 —
dms., l.c.l., frt. alld. lb. .14 - —
tanks, frt. alld. lb. .12 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .53 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .39½- —
bbls., l.c.l., same basis lb. .42½- —
18-25 cps., bbls., c.l., same basis. lb. .41½- —
bbls., l.c.l., same basis lb. .44½- —
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .44½- .47½
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .44 - —
bbls., l.c.l., same basis lb. .47 - —
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .46 - —
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd lb. .88 - —
Nitroethane, dms., c.l., dlvd. E. lb. .28½- —
dms., l.c.l., dlvd. E. lb. .30 - —
tanks, dlvd E. lb. .26 - —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions, direct application, tanks, f.o.b. works unit-ton. 1.64 - —
Manufacturing type, same basis, unit-ton. 1.32 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va. lb. .065 - —
Cyls., t.l., min. 5 tons, same basis lb. .07½- —
Cyls., l.c.l., t.t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works. unit-ton. 3.50 - —
(The foregoing price is per unit NH_3, plus 50c. per unit a.p.a., bulk, f.o.b. producers' works, Chicago.)
Nitromethane, dms., t.l., dlvd. E. lb. .26 - —
dms., l.t.l., dlvd. E. lb. .27½- —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., l.c.l. frt. alld lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tanks, same basis lb. .26 - —
1-Nitropropane prices West of Rockies are 1c. per lb. higher.
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
m-Nitrotoluene, tech., dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., frt alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l. frt. alld. lb. .22½- —
dms., l.c.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .20 - —
Nonylphenol prices on shipments to Western States are 2c. higher.
Noscapine, cns. oz. 8.00 - —
Nutmegs, East Indian, whole, bgs. lb. 1.26 - —
West Indian, bgs lb. 1.00 - —
Nutmeg oil, USP dist., East Indian, cns. lb. 9.00 -12.00
West Indian, cns. lb. 9.00 -12.00
Nux vomica, bls. lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .45 - .47
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .41½- —
dms., l.c.l., dlvd. Zone 1 lb. .43½- .44½
tanks, dlvd. Zone 1 lb. .37½- —
Octyl alcohol, perfumers grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., l.c.l. same basis lb. .55 - —
Octylphenol, bgs., c.l., works lb. .22½- —
bgs., l.c.l., works lb. .23 - —
tanks, works lb. .21½- —
Octylphenol in dms., 11c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liquid, dms. lb. .15¾- .16¼
tanks lb. .14¼- —
Oleic acid, dbl.-dist. (white), dms. lb. .19¾- .22¼
tanks lb. .17¼- —
S. D., dms. lb. .18¾- .21¼
tanks lb. .16¼- —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs. lb. .15 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots. lb. 5.00 - 7.68
Extra fine, bots lb 8.00 - 9.50
Olive oil, edible, dms., spot, ex whse. gal. 2.35 - 2.40
Olivine, crude, works ton. 12.00 - —
20 mesh, works ton. 15.00 - —
100 mesh works ton. 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 - —
gran., cns., 50 lbs., same basis. oz. 21.65 - —
powd., cns., 50 lbs., same basis. oz. 21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms lb. .60 - —
Florida, cns., dms lb. .40 - .45
Messina, cns. lb. 3.25 - 5.00
West Indian, bitter, cns., dms lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .28 - .30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns. lb. 1.80 - 2.30
Orris root, Florentine, bls. lb. .55 - —
powd., bbls., bxs. lb. .65 - —
Verona, bls. lb. .35 - —
powd., bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram. 3.00 - 4.00
Ouricury wax, crude, bgs. lb. .52 - —
Refd., pure, bgs. lb. .54 - .56
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb. higher.
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld. lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

P

Palm oil, clarif., dms lb. .14¾- .15¾
tanks, New York lb. .12 - —
Palm oil acid, double dist., dms. lb. .16 - .18¼
tanks lb. .13½- —
single dist., dms lb. .15½- .18
tanks lb. .13 - —
Palmarosa oil, cns lb. 4.90 6.00
Papain, powd., bots. lb. 3.25 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 —
cns., smaller lots oz. 5.05 5.20
Papaverine sulfate, nat. or syn., USP, cns oz 7.10 7.35
Paprika, Bulgarian, bgs lb. .32 - —
Hungarian, bgs. lb. .33 - —
Spanish, bgs. lb. .30 - —
Yugoslavian, bgs. lb. .38 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).

One oil guarantees
full orange flavor
every single time
It's Exchange Orange Oil, U.S.P., California Cold Pressed. Here's orange flavor as it should be—with the full flavor, aroma and color of California's finest oranges. And it is uniform—the same, batch after batch. Only the Sunkist Growers, with the world's largest stocks of quality oranges at their command, could bulk-blend an oil with such consistent flavor balance.
Always look for "Exchange" on the tamper-proof container seal—your guarantee it was pressed and packed by the Sunkist Growers. You can depend on it.
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Products Sales Department, Ontario, California
Exchange Brand Orange Oil is distributed in the U. S. by Dodge & Olcott, Inc.; Fritzsche Brothers, Inc.; Ungerer & Co.
Exchange

Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Anisidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).

Para toner, red, bbls	lb.	1.30	—
Chlorinated, kgs.	lb.	1.41	—
Paraffin, crude, scale, white, 123°-127°F., ASTM tanks refy.	lb.	.0655	.0660
Fully refd., 122°-124°F., ASTM,	lb.	.0765	—
125°-127°F., ASTM, tanks, refy	lb.	.0735	—
130°-132°F., ASTM, tanks, refy	lb.	.0765	—
132°-134° F., ASTM, tanks, refy.	lb.	.0765	—
135°-137 F., ASTM tanks, refy	lb.	.0765	—
AMF temperatures are an arbitrary 3°F higher than ASTM			
Paraffin oil, pale, 100-110 vis., at 100°F., tanks e a s t coast refy	gal.	.14	—

Paraffin wax (see Paratfin)

Paraformaldehyde 91% flake, bgs., c.l., frt alld	lb.	.10	—
bgs. l.c.l. frt alld	lb.	.12	.13
91%, powd., bgs., c.l. ex whse	lb.	.1715	—
bgs. l.c.l. ex whse	lb.	.1865	—
USP-X, fib. dms., c.l	lb.	.10	—
fib dms. 1,000-lb lots	lb.	.20	—
fib dms., smaller lots	lb.	.21½	—
Paraldehyde tech., 98%, 55-gal. dms., t.l., dlvd. E	lb.	.14	—
55-gal. dms., l.c.l., dlvd. E	lb.	.15½	—
tanks, dlvd. E	lb.	.11½	—

Paranitraniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)

Parathion ethyl, dms. frt alld	lb.	.84	—

Parathion prices 2c per lb higher in West.

Paratoluenesulfonamide (see p-Toluenesulfonamide).

Passion flower herb, bls	lb	.35	.40
Patchouli oil, imp., cns.	lb	5.60	6.50

Peach kernel oil, USP (see Apricot kernel oil).

Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies	lb	1.00	—

Peacock blue price 1c higher W of Rockies.

Peanut meal, old process, 45% bgs., f.o.b. mills	ton.	67.00	—
solvent, same basis	ton.	65.00	—
Peanut oil crude tanks, f.o.b mills.	lb.	.15¾	—
Refd., dms.	lb.	.20⅞	.21⅛
tanks	lb.	.18⅞	—
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b shipt pt	kilo	4.52	—
Pelargonic acid, dms., c.l., dlvd. E	lb.	.27½	—
ton lots, same basis	lb.	.25½	—
tanks, same basis	lb.	.25	—
Penicillin, potassium, cryst., bulk, 1,000,000 units		.018	—
Penicillin, procaine, cryst., bulk, 1,000,000 units		.020	—
Pennyroyal oil USP imported, cns.	lb.	2.35	2.80
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald	lb.	.21	—
bgs., less than ton-lots, same basis.	lb	.29	—
bgs., c.l., t.l., 2,000 lb. minimum, same basis	lb.	.22½	—

Pentachlorophenol in dms 1c. higher

Pentaerythritol tech., bgs., c.l., dlvd	lb.	.29	—
bgs., l.c.l., dlvd	lb.	.30	—

Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).

Pentane, indust. tanks, f.ex refy	gal.	.14	—
Pentobarbital, dms., 100 lbs. or more	lb.	6.00	—
Pepper, black, Malabar, bgs	lb.	.47	—
Lampong, bgs.	lb.	.47	—
Red, Funtuas, bgs.	lb.	.32	—
Japanese, Hontoka, bgs	lb.	.[illegible]	—
Santaka, bgs.	lb.	.31½	—
Sudanese, bgs.	lb.	.[illegible]	—
White, Muntok, bgs	lb.	.57	—
Peppermint leaves, dom., USP, bls., dms	lb.	No stocks.	
imp., USP, dms.	lb.	.85	.90
Peppermint oil, nat., dms.	lb.	4.40	—
Redist., USP, dms.	lb.	4.65	—
Perchloroethylene dms. c.l., or t.l., dlvd	lb.	.13½	—
dms., l.c.l., dlvd.	lb.	.15¼	—
tanks, dlvd.	lb.	.11¼	—
tanktruck, 1,000 gal. min dlvd	lb	.12¼	—
Peri acid, dry bbls., frt alld	lb	1.60	—
Paste, bbls. frt. alld	lb	1.55	—
Peru balsam, dms	lb	1.15	1.50

Persic oil, USP (see Apricot kernel oil).

Petitgrain oil South American, cns., c.ms	lb	2.30	—
Petrolatum, NF, cream, dms., c.l., refy	lb.	.065	.06625
dms., l.c.l., dlvd	lb.	.11125	.11250
tanks, refy	lb.	.0625	.06375
NF, extra amber, dms., c.l., refy.	lb.	.07625	—
dms., l.c., dlvd	lb.	.1025	—
tanks, refy.	lb.	.05375	—
NF, soft yellow, dms., c.l., refy	lb.	.07625	—
dms., l.c.l., dlvd.	lb.	.1025	—
tanks, refy.	lb.	.05375	—
USP, lily white, dms., c.l., refy.	lb.	.09125	.09675
dms., l.c.l., dlvd	lb.	.1175	.1225
tanks, refy.	lb.	.0[illegible]	—
USP, snow white, dms., c.l., refy.	lb.	.09625	—
dms., l.c.l., dlvd.	lb.	.1225	—
tanks, refy.	lb.	.07375	—

Full tankwagons of petrolatum are ¼c. more per lb. than tankcars.

Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms. c.l. works.	lb.	.16½	.18¾
non-ret. dms. l.c.l., works	lb.	.17½	19
tanks, works	lb.	.14½	.17
50-55% sulfuric content, non-ret. dms., c.l., works	lb.	.16	—
non-ret. dms., l.c.l., works	lb.	.17	—
tanks, works	lb.	.13	—
o-Phenetidine, dms., c.l., frt. alld. E	lb	.91	—
dms., l.c.l., same basis	lb.	.93	—
p-Phenetidine, dms., c.l., frt. alld.	lb	1.05	—
dms. same basis	lb	1.08	—
Phenobarbitol, USP, dms., 100-lbs., frt. alld	lb.	3.25	—

Phenobarbital-Sodium (see sodium phenobarbital)

Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld E. of Rockies	lb.	.17¼	—
non-ret. dms., l.c.l., same basis.	lb.	.18¼	—
tanks, same basis	lb.	.15¼	—
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis	lb.	.17	—
non-ret. dms., l.c.l., same basis.	lb.	.18	—
tanks, same basis	lb.	.15	—
39°C., or above, tar dist., non-ret. dms., c.l., same basis	lb.	.18½	—
non-ret. dms., l.c.l.	lb.	.19½	—
tanks, same basis	lb.	.16½	—
Phenol, USP, syn., dms., c.l., t.l., frt. alld	lb.	.19	—
dms., l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.17	—
Phenolphthalein, USP or yellow, 250-lb dm., 2,000 lbs., frt. alld	lb	1.30	—
250-lb dm., same basis	lb	1.35	—
Phenothiazine drench fib dms., t.l., dlvd	lb.	.46	—
fib dms., ton lots, dlvd	lb.	.49	—
NF, fib dms., t.l., dlvd	lb.	.45	—
fib dms., ton lots, dlvd	lb.	.48	—
Phenyl acetate, dms., 100-lb. lots, works	lb	.80	—

Phenyl salicylate (see Salol)

Phenylacetaldehyde, soln., 50% bots	lb	2.15	2.35
100%, bots.	lb	3.80	4.00
Phenylacetic acid, pure, cryst., cns	lb.	1.25	1.75
dl-Phenylalanine, dms., 1-kilo	kilo.	65.00	—
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms., 200-lb lots, dlvd. E	lb	3.45	—
fib dms. smaller lots, dlvd E	lb	3.80	—
N-Phenyldiethanolamine, dms., c.l., dlvd. E	lb.	.50	—
dms., l.c.l., dlvd. E	lb.	.51½	—
tanks, dlvd. E	lb.	.47½	—
m-Phenylenediamine, dms., c.l., t.l., frt. alld	lb.	1.08	—
l.c.l., l.t.l., same basis	lb	1.10	—
o-Phenylenediamine, comi, fib. dms, 100 to 1,000 lbs., works.	lb.	1.70	1.80
p-Phenylenediamine, tech., dms, works	lb	1.55	—
Phenylethanolamine, dms., c.l., works	lb.	.75½	—
dms., l.c.l., same basis	lb.	.76¼	—
Phenylethyl acetate bots.	lb	1.25	1.40
2-Phenylethyl alcohol, extra, dms.	lb	1.14	1.50
Standard, dms	lb	1.10	1.60
b-Phenylethylamine dms., 20,000 lbs. or more, frt. alld	lb	1.50	—
dms. smaller lots, frt. alld	lb	1.70	1.85
Phenylethylphenyl acetate, bots	lb	4.00	4.25
Phenylglyconic acid (see Mendelic acid).			
Phenylhydrazine 97% 450-lb dms.	lb	1.45	—
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E	lb	1.80	—
fib dms. smaller lots, dlvd E	lb	2.10	—
o-Phenylphenol dms. l.c.l. works.	lb.	.48	.50
p-Phenylphenol, bgs. c.l. works	lb.	.38½	—
bgs. l.c.l., works	lb.	.43	—
Philippine copal gum, pale, chips, bgs	lb.	.23¼	.27
nubs, bgs.	lb.	.33¼	.37
seeds, bgs.	lb.	.20	Nom.
sorts, bgs.	lb.	.20	.24
Phlorogluecinol, comi., fib. dms., works	lb	6.40	—
CP bots., works	lb.	17.75	—
Tech. fib dms. works	lb	10.45	—
Phloxin red toner (see Eosin red toner)			
Phosgene, ref cyls. works	lb	15½	—
Phosphate defluorinated (see under D).			
Phosphate rock, Curacao, Atlantic ports New Orleans	ton.	46.50	—

Phosphate rock, Florida, land pebble run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines.

short-ton.	4.969	5.398	
68-70%, b.p.l., bulk, c.l., same basis	short-ton.	5.849	5.858
70-72%, b.p.l., bulk, c.l., same basis	short-ton.	6.429	6.438
74-75%, b.p.l., bulk, c.l., same basis	short-ton.	7.329	7.338
76-77%, b.p.l., c.l., bulk, same basis	short-ton	8.219	8.228

Above Florida prices are based on fuel oil at 2.52 per bbl and labor at $1.64

Phosphoric acid, food grade, 75%, cbys. c.l. works, E., frt. equald	100 lbs.	7.00	—
cbys. l.c.l., same basis	100 lbs	7.25	7.75
tanks, t.w., works	100 lbs	5.60	—
80% cbys. c.l. frt equald	100 lbs	7.85	—
cbys. l.c.l., works	100 lbs	8.10	9.35
tanks, t.w., works	100 lbs	6.00	—
NF 85% cbys., c.l., works.	100 lbs	8.50	—
cbys., l.c.l., works	100 lbs	8.75	9.00
tanks, t.w., works	100 lbs	6.65	—
Phosphorus, amorph., red, dms., t.l., works	lb.	.55	—
dms. smaller lots, works	lb.	.56	.57
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	.20½
dms. l.c.l. works, frt. equald	lb.	.21½	—
tanks, works, frt. equald	lb.	.19	—
Phosphorus oxychloride, dms., c.l., works	lb.	.14	—
dms. l.c.l., works	lb.	.15	—
tanks, works frt. equald	lb.	.12½	—
Phosphorus pentasulfide, powd., dms., c.l., works	lb.	.13½	—
dms. l.c.l. works	lb.	.14½	.15½
Solid, dms., c.l. works	lb.	.11½	—
dms. l.c.l. works	lb.	.12½	.13½
Phosphorus pentoxide, dms., c.l., works	lb.	.1375	.1475
dms. l.c.l., works	lb.	.1475	.1675
Phosphorus sesquisulfide, dms., cs., c.l., works	lb.	.38	—
dms. l.c.l. works	lb.	.39	.40
Phosphorus trichloride, dms., c.l., works	lb.	.14	—
dms. l.c.l. works	lb.	.15	—
tanks, works	lb.	.12½	—
Phthalic anhydride bgs., c.l., works, frt. equald	lb.	.20	—
bgs., l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.19½	—
Phthalimide 97-98%, dms., frt. alld	lb.	.65	—
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies.	lb.	2.90	—
Resinated, bbls., same basis	lb.	2.75	—
Water dispersable, bbls., same basis	lb.	1.59	—

Phthalocyanine blue prices 1c. higher W. of Rockies.

Phthalocyanine green toner, bbls., works	lb.	3.35	—
Resinated, bbls.	lb.	3.00	—
Water dispersable, bbls.	lb.	1.71	—

Phthalocyanine green prices 1c. higher W of Rockies

Phthalylsulfacetamide, fib. dms., 1-000-lb lots or more	lb.	5.00	—
NF, fib. dms.	lb.	5.20	—
a-Picoline, dms. c.l. works, frt. equald	lb.	.46	.48
dms., l.c.l., works, frt. equald	lb.	.46½	.49
tanks, same basis	lb.	.43	.46
b-Picoline, 98% dms., t.l., works.	lb.	1.05	—
dms., l.c.l. same basis	lb.	1.15	—
tanks, same basis	lb.	.95	—
b,g-Picoline 5°C. dms. c.l., works.	lb.	.32½	—
dms., l.c.l., works	lb.	.33	—
g-Picoline, dms. t.o.b., works	lb.	1.60	—
tanks, t.l., same basis	lb.	1.50	—
Picric acid, NF bbls.	lb.	.85	—
Tech., bbls.	lb.	.50	—
Pigment green B, kgs	lb.	1.55	—
Pilocarpine hydrochloride, USP, bots	oz.	4.75	5.25
Pilocarpine nitrate USP bots., vials.	oz.	4.65	5.15
Pimento, Jamaican, bgs	lb.	.72	—
Mexican, bgs.	lb.	.62	—
Pimento berry oil, NF, dms.	lb.	3.75	9.25
Pimento leaf oil, crude, cns	lb.	2.50	2.60
Pine oil, dest.-dist., dms., t.c.l. works	lb.	.15	—
dms. l.c.l. ex whse New York.	lb.	.173	—
Steam-dist. dms. ex whse., New York	lb.	.185	—
dms., dlvd	lb.	.188	—
Pineneedle oil, Siberian (see Abies Siberica oil).			
Pink root, bls.	lb.	2.25	—
Piperazine, anhyd., dms. c.l., frt. alld. E	lb.	1.80	—
dms., l.c.l., frt alld. E	lb.	1.85	—
Piperazine citrate, 36% dms., 1,000 lbs. or more, frt. alld	lb.	1.33	—
Piperazine dihydrochloride, 51%, dms. 1,000 lbs or more, frt alld	lb.	1.29	—
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more, frt. alld	lb.	.90	—
dms., 200-900 lbs., frt. alld	lb.	.93	—
Piperazine phosphate, 42%, dms., 1,000 lbs or more, frt. alld	lb.	1.11	—
Piperidine, dist., 98% min., 5 dms. or more, l.c.l., t.l.t., f.o.b. works	lb.	2.65	—
1-4 dms., same basis	lb.	2.70	—
dms., c.l., t.l., frt. equald	lb.	2.55	—
Piperonyl butoxide dms. dlvd. E.	lb.	4.50	5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works	oz.	81.00	85.00
Pleurisy root, bls.	lb.	.45	.50
Podophyllum resin, NF, dms.	lb.	12.50	15.50
Poke root, bls.	lb.	.19	.22
Polymyxin, bots., bulk., 50 billion units or more		.52	—
bulk, bots., 25-50 billion units. 1,000,000 units.		.54	—
bulk, bots., 1-25 billion units. 1,000,000 units.		.56	—

Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 —
dms., 10,000-20,000-lb lots, works. lb. .44 —
dms., smaller lots, works lb. .47 .49

Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works lb. .42 —
dms., 10,000-20,000-lb. lots, works lb. .44 —
dms., smaller lots, works lb. .47 .49

Pontianak copal gum, chips, bgs.	lb.	.23½	.26
Nubs, bgs.	lb.	.38	.44
Poppy seed, Argentine, bgs.	lb.	No stocks.	
Dutch, bgs.	lb.	.14	—
Danish, bgs.	lb.	.14	—
Polish, bgs.	lb.	.13	—
Turkish, bgs.	lb.	.11	—
Potash, caustic, liq., 45% basis, dms., c.l., works	lb.	4.25	—
dms., l.c.l., same basis.	100 lbs.	5.25	—
tanks, same basis	100 lbs.	3.70	—
reg., flake, 88-92% dms., c.l., same basis	100 lbs.	9.55	—
dms., l.c.l., same basis.	100 lbs.	11.05	—
solid, 88-92% dms., c.l., works	100 lbs.	9.10	—
dms. l.c.l., works	100 lbs.	10.60	—
Potassium acetate, NF, 200-lb. dm., f.o.b works. E	lb.	.31	—
Potassium bicarbonate, USP, gran. dms	lb.	.22	—
powd., dms	lb.	.24	—
Potassium bichromate, gran., bgs., c.l., t.l., works	lb.	.18	—
bgs., l.c.l., works	lb.	.18½	.19¼

Potassium bichromate in dms. ½c. higher.

Potassium bitartrate, NF, gran., powd., 100-lb bgs., c.l., frt. equald	lb.	.37	—
100-lb. bgs., 5,000 lbs., 1 shipt., same basis	lb.	.36	—
100-lb. bgs. smaller lots, same basis	lb.	.40	—
Potassium borohydride, powd., dms., works	lb.	16.00	22.00

Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots

Potassium bromate, 200-lb. dms., c.l. frt alld	lb.	.40	—
Potassium bromide, USP gran., bbls., kgs	lb.	.39	.40
Potassium carbonate, dom., NF, gran., bbls., cms	lb.	.22	.24
Dom. tech. powd., bbls., dms	lb.	.21	.22
Dom., calcinated, bgs. c.l. works. 100 lbs.		8.50	—
bgs., l.c.l. same basis 100 lbs.		9.55	—
Dom. hydrated, 83-85%, bgs., c.l., works 100 lbs.		7.10	—
bgs. l.c.l. works 100 lbs.		8.15	—
Potassium chlorate cryst. dms., c.l., works	lb.	.12¼	—
dms., l.c.l., works	lb.	.13½	.14½
Powd., dms., c.l., works	lb.	.12¾	—
dms. l.c.l., works	lb.	.14	.15
works	lb.	.12¼	—
Potassium chlorate, NF, cryst., dms. 2,000 lbs or more, works	lb.	.16¾	—
NF, gran., 25-lb metal dms	lb.	.36	—
NF powd., dms., 2,000 lbs. or more, works	lb.	.17¼	—
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works	ton.	29.00	—
bgs., c.l., works	ton.	34.00	—
99.3% KCL, bulk, c.l., works.	ton.	28.00	—
bgs., c.l., works	lb.	33.00	—
USP, cryst., dms	lb.	.17	—
USP, gran., dms	lb	.21	.23
USP powd., dms.	lb.	.24	.26

Potassium chloride agricultural (see Potassium muriate).

Potassium chromate, tech., dms., works	lb.	.50	.51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E	lb.	.43	—
powd., 250-lb dms., same basis.	lb.	.46	—
Potassium cyanide, dms., 20,000-lb. lots or more, works	lb.	.42½	—
dms., 2,000-19,999-lb. lots, works.	lb.	.43	—
dms., smaller lots, works	lb.	.44	.44½

Potassium dichromate (see Potassium bichromate).

Potassium ferricyanide, dms., ton lots, works	lb.	.50	—
dms., smaller lots, works	lb.	.65	—
Potassium ferrocyanide, dms., ton lots	lb.	.24½	—
dms., smaller lots	lb.	.29	—
Potassium fluoborate, fib. dms., c.l., works	lb.	.30	—
fib dms., l.c.l., works	lb.	.31	—
Potassium fluoride, dms., works	lb.	.36	.37
Potassium gluconate, 100-lb dm., f.o.b. works E	lb	1.67	—
Potassium guaiacol sulfonate, NF, dms	lb	2.10	2.30

Potassium hydroxide, tech. (see Potash caustic).

Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots	lb.	.33½	.38
Potassium hypophosphite, NF fib. dms., 1,000-lb. lots	lb.	1.38	—
Potassium iodide, USP cryst., gran., 200-lb. dm., f.o.b. works		1.55	—
Potassium manure salt, min. 20% K.O. bulk, c.l., works. unit-ton.		.17	.1765

Potassium metabisulfite, gran. dms.,

	lb.	.16	—
Powd., dms.	lb.	.27	—

Potassium muriate, standard, bulk,

c.l., works unit-ton.		.37½	.39⅛
bagged 60% minimum K_2O, same basis	ton.	26.60	27.80
Gran., bulk, c.l., works unit-ton.		.38½	.40¼
bagged, 60% minimum K_2O, same basis	ton.	28.10	30.10

Inside prices apply to material contracted for prior to July 1, 1960.

Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots	100 lbs.	17.00	—
bbls., smaller lots	100 lbs.	18.00	19.00
gran., bgs., 20-ton lots	100 lbs.	9.50	—
bgs., smaller lots	100 lbs.	11.00	12.00
powd., bgs., 20-ton lots	100 lbs.	10.50	—
bgs., smaller lots	100 lbs.	12.00	13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm. f.o.b. works E	lb.	.33	—
Potassium pentaborate, gran., dms., c.l., works	ton.	219.50	—
dms., ton lots, ex whse	100 lbs.	17.48	—
dms., smaller lots, ex whse	100 lbs.	18.73	—

Powdered potassium pentaborate $10 per ton higher.

Potassium perchlorate, dms., c.l., works	lb.	.18¼	—
dms. l.c.l., works	lb.	.19	.20
Potassium permanganate, comi., kgs., works	lb.	.25	.33
USP dms., works	lb.	.29	.35
Potassium pyrophosphate, tetrabasic, dms., works	lb	.1475	.1575

Potassium prussiate red (see Potassium ferrocyanide)

Potassium prussiate yellow (see Potassium ferro-cyanide).

Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works	100 lbs.	6.50	—
dms., l.c.l., 5 dm. lots or more, works	100 lbs	7.25	7.65
tanks, works	100 lbs.	6.15	—
40.5° Be 1:2.1, dms., c.l., works.	100 lbs.	5.95	—
dms., l.c.l., 5 dm. lots or more, works	100 lbs.	6.70	—
tanks, works	100 lbs	5.60	—
Glass grade, bgs., c.l., works	100 lbs.	17.30	18.00
bgs., l.c.l., works	100 lbs.	17.80	—
Soln., 29° Be. 1:2.5, dms., c.l., works	100 lbs.	4.95	—
dms., l.c.l., 5-dm. lots or more, works	100 lbs.	5.70	—
tanks, works	100 lbs	4.60	—
Potassium silicofluoride, bgs., works.	lb.	.09½	.10

Potassium silicofluoride in drums, 0.4c. per lb higher.

Potassium stannate, dms. frt. alld.	lb.	.870	.904
Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., works unit-ton.		.70½	.72½

Inside price applies to tonnage contracted for prior to July 1, 1960

Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium sulfate, NF VII, cryst., dms.,	lb.	.31	.33
NF VII, gran., 400-lb. dm.	lb.	.18	—
NF VII, powd., 400-lb dm.	lb.	.17	—
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate)			
Potassium thiocyanate, NF, cryst., dms., works	lb.	.96	.98
Tech., dms., works	lb.	.77	.79
Potassium titanate, ctns., c.l., works.	lb.	.16¼	—
ctns. 5-ton lots, works	lb.	.16¼	—
ctns., 1-ton lots or less, works	lb.	.16¾	—
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price.	ton.	13.45	—
bulk, works, July forward	ton.	14.00	—
Potassium-sodium tartrate, NF gran or powd., 250-lb dms., c.l., works E	lb.	.42½	—
250-lb. dms., 5,000-lb. lots, same basis	lb.	.43	—
250-lb dms., same basis	lb.	.43½	—
Potassium-titanium fluoride, fib. dms., works	lb.	.39	.40
Potassium-zirconium flouride, fib. dms., c.l., works	lb.	.50	—
fib dms., l.c.l., works	lb.	.52½	.55
Pregnenolone, bots.	gram.	No prices.	
Pregnenolone acetate, bots	gram.	No prices.	
Procaine hydrochloride USP antibiotic grade dms., 2,000-lb. lots, frt. alld.	lb.	2.10	2.25
USP, ampule grade, dms., 1,000-lb. lots, frt. alld	lb	2.40	—
dms., 500 lbs	lb	2.45	—
dms., 100 lbs	lb	2.50	—
Progesterone, USP bots	gram	No prices.	
Pregnenolone acetate, bots	gram.	No prices.	

Propenyl guaethol, dms. .....lb.24.30 -27.60
b-Propriolactone, tech., dms., c.l., f.o.b. works..lb. .47½- —
dms., l.c.l., l.t.l., same basis..lb. .48½- —
tanks, same basis .....lb. .45 - —
Propionic acid, syn., pure, dms., c.l., dlvd..lb. .23¼- —
dms., l.c.l., dlvd. .....lb. .24¾- —
tanks, dlvd. .....lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. .....lb. .14¾- —
dms., l.c.l., dlvd.....lb. .16½- —
tanks, dlvd. .....lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd. lb. .14 - .15
dms., l.c.l., dlvd.....lb. .15½- .16½
tanks, dlvd. .....lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 4.40
n-Propyl-p-hyroxybenzoate, USP, dms lb. 2.30 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 —
bots., smaller lots .....kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 —
dms., l.c.l., same basis .....lb. 1.255 —
n-Propylene dichloride, consumers', dms., c.l., dlvd. E lb. .0845- —
dms., t.c.l., same basis.....lb. .0995- —
tanks, same basis .....lb. .07 —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., dlvd. E. lb. .15 - —
dms., t.c.l., same basis.....lb. .16¾- —
tanks, same basis .....lb. .12½- —
USP, dms., c.l., dlvd. E.....lb. .17 - —
dms. l.c.l., same basis.....lb. .18¾- —
tanks, same basis .....lb. .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd. lb. .20 - —
dms., t.c.l., same basis .....lb. .21 - —
tanks, same basis .....lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E. lb. .17 - —
dms., t.c.l., dlvd. E.....lb. .18½- —
tanks, dlvd. E .....lb. .14½- —
Psyllium seed, black, bgs.....lb. .42 - .45
Blonde, bgs .....lb. .18 - .20
Husks, bgs. .....lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots .....lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs, ton lots lb. .06½- —
fine, bgs. ton lots .....lb. .04 - —
sun dried, coarse, bgs..ton.60.00 —
fine, bgs. .....ton.60.00 -70.00
Pumpkin seed, ngs .....lb. .25 .26
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 - 9.80
100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.11.00 -11.35
purit, 20%, dms., works lb.11.00 -11.35
Pyridine, denat., dms. c.l., works and frt. equald. gal. 2.77 - —
dms., l.c.l., same basis.....gal. 2.80 - —
Refd., 2° non-ret. dms., c.l., same basis. lb. .75½- —
dms., l.c.l., same basis.....lb. .76 - .76½
tanks, same basis .....lb. .71 - —
Potassium persulfate, dms., c.l., works lb. .17¼- —
dms. t.c.l., works lb. .18 - .21
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works kilo.95.00 -100.00
Pyrites, Canadian, 48-50% S, mines, long-ton. 4.50 - 5.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works lb. 3.50 - —
Pyrogallol, NF, 100-lb dms.....lb. 3.50 - —
Pyroxylin, USP, bots .....lb. 9.50 - —

Q

Quassia chips .....lb. .10 - —
Quicksilver (see Mercury metal).
Quince seed, bgs .....lb. 1.75 - 2.00
Quinidine sulfate, USP, 1,000-oz. dm..oz. .78½- —
Quinine, NF, 1,000-oz. dm. .....oz. .3750- —
Quinine bisulfate, USP, 1,000-oz. dm. oz. .38 - —
Quinine hydrochloride, 1,000-oz. dm. oz. .3650- —
Quinine sulfate, USP, 1,000-oz. dm. oz. .3150- —
Quinoline, dms., c.l., frt. equald.lb. .50¾- —
dms., l.c.l., same basis.....lb. .51¼- —
tanks, same basis .....lb. .50 - —

R

R salt paste, dms., c.l., t.l., frt. alld., 100% basis lb. .98 - —
Powd., dms., c.l., t.l., frt. alld., 100% basis..lb. 1.08 - —
Rapeseed oil, dms. .....lb. .19 - .19½
tanks .....lb. .17½- —
Rare earth oxalate, NF, 45-50%, bgs. works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner

Red precipitate (see Mercuric oxide, red)
Red toner, Lake C, alizarine, bbls., works lb. 1.30 - —
Reserpine, cryst. bots gram. 1.25 - —
Resorcinol, tech. grade, bgs., c.l., works, frt. equald. lb. .77½- —
bgs., l.c.l., same basis.....lb. .78½- —
Resorcinol in dms. 1c. per lb. more.
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
USP, powd., dms., works.....lb. 2.95 - —
Rhatany root, bgs .....lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb cans.....lb.42.00 -51.00
Synthetic .....lb.14.00 -16.00
Rhubarb root, India, whole, bgs..lb. .25 - —
powd., bgs. .....lb. .38 - —
Riboflavin, USP fib. dms., kilo or more, dlvd kilo.36.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo.104.70 - —
Rice bran oil, clarified, dms., t.c.l. lb. .15½- —
tanks, dlvd. E .....lb. .14 - —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat., Bulgarian, bots lb.1,152.00- —
Turkish, bots., otto.....lb.600.00 -700.00
absolute .....lb.145.00 - —
Rosemary oil, Spanish, NF, cns., dms..lb. 1.10 - 1.20
Spanish, tech., cns., dms.....lb. .80 - .93
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works unit-lb. .10½- —
Resin, 25-45%, fib, dms., works, unit-lb. .10½- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas .....gal. .155 — —
Rue oil, bots.....lb. 2.75 3.00
Rutin, NF, fib, dms., 10 kilo lots. kilo.11.00 - —
fib, dms., 5 kilo lots .....kilo.11.50 - —
fib, dms., 1 kilo .....kilo.13.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis .lb. .24 - —

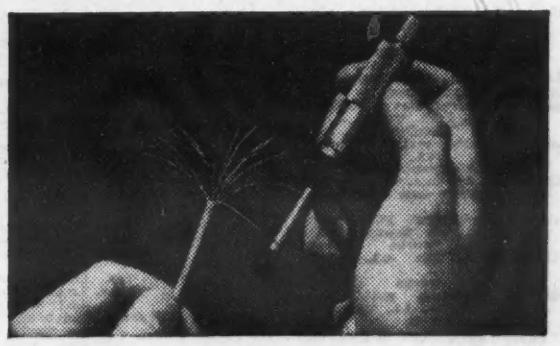
S

S acid, bbls., works.....lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib, dms., 1,000-lb. lots, works lb. 2.50 - —
Saccharin, USP, gran., soluble, dms., 1,000-lb. lots... lb. 1.50 - —
dms., smaller lots .....lb. 1.60 - —
USP, powd., soluble, dms., 1,000-lb. lots. lb. 1.55 - —
dms., smaller lots .....lb. 1.65 - —
USP, powd., insoluble, dms., 1,000-lb. lots..lb. 1.53 - —
dms., smaller lots.....lb. 1.63 - —
Safflower oil, dms., New York....lb. .19¼- .19¾
tanks, Atl. coast .....lb. .17¼- —
Saffron, Mancha Superior, tins lb.19.50 - —
Safrol, dms. .....lb. .65 - —
Sage, Dalmatian, bgs.....lb. .40 - —
Greek, cns. .....lb. .15 - —
Italian, cns. .....lb. .18 - —
Sage oil, clary, bots.....lb.12.00 -15.00
Dalmatian, cns. .....lb. 2.85 3.25
Spanish, cns .....lb. 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb. 1.23 - —
dms., t.c.l., same basis .lb. 1.25 - —
Salicylamide, 100-lb dms lb. 1.03 - —
Salicylic acid, tech., fib, dms., c.l., t.l., dlvd lb. .42½- —
fib dms, t.c.l., dlvd lb. .44¾- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .51¾- —
200-lb. fib. dms., less than 1,000 lbs lb. .54¾- —
Cryst., 100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .56¾- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .58¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .51¼- —
Salol, NF, gran., bbls., kgs lb 1.20 - —
Powdered salol, 25c per lb higher.
Salt, rock, paper bgs., c.l. 100 lbs 1.09 - —
Salt, table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, E. Indian, chips, bgs., lb. .53 - .66
powd, fib dms lb 75 76
Sandalwood oil, cns .....lb.26.00 -30.00
Sarcosine, tech, tanks, f.o.b., works, frt. equald lb 1.03 —
lb No stocks.
Sassafras oil, artif., dms .....lb. 65 —
Nat., dom., dms .....lb 1.40 - —
Savory oil, cns lb 4.75 - —
Schaeffer's salt paste, dms., frt. alld. 100% basis lb. .85 - —
Powd. bgs. frt alld. 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, 10 oz. lots, bots oz.13.50 - —
Sebacic acid, CP, bgs. c.l., works. lb. .69¼- —
bgs., t.c.l., works lb. .71½- —
Purified, bgs. c.l., works ... lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture, fib dms. 5,000-lb. lots lb. .30½- —
fib dms., smaller lots lb. .31 - .33
Selenium, powd., 99½%, dms., dlvd. lb. 6.50 - —
Senega root, bls.....lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings .....lb. .16 - —
Tinnevelly, No. 1, bls. .....lb. .22 - —
No. 2, bls .....lb. .16 - —
No. 3, bls .....lb. .14 - —
pods, bls .....lb. .38 - —
powd., bbls., bxs.....lb. .17 - —

HOW *HERCULES* HELPS...

BRIGHTEN UP WALLS—Recently introduced nationally, Imperial® Fabric Wallcovering offers many new and exciting ideas in economical home decorating. Styled by John and Earline Brice, famous designers of home furnishings, it introduces new, sun-splashed colors . . . new, graceful designs . . . guaranteed colorfast washability. Easy to hang and easy to remove, it's the lowest priced fabric wallcovering made. Imperial dealers now feature it, from coast to coast.

SOLVE PAINT PROBLEMS—Hercules® steam-distilled wood turpentine assures a better job when thinning oil-base paints, varnishes, and enamels because it keys the paint to the surface, makes it less liable to crack or scale, and helps distribute the finish evenly. That's why so many professional painters rely on this familiar orange-and-black can.



IMPROVE INSULATION—Where insulation problems require a new approach, Pro-fax® polypropylene often provides the answer. This new plastic has properties unmatched by other insulating materials, as demonstrated by the communication cable shown here, where a 3-mil coating of Pro-fax meets every construction requirement.

HERCULES

HERCULES POWDER COMPANY
INCORPORATED
Hercules Tower, 910 Market Street, Wilmington 99, Delaware
CHEMICAL MATERIALS FOR INDUSTRY

661-6

Serpentaria root, bls. lb. 6.50 - —
Sesame oil, USP, dms., t.c.l. lb. .37 - .38
Sesame seed, Colombian, bgs. lb. .15½- —
Lebanese, hulled, bgs. lb. .19 - —
Nicaraguan, hulled, bgs. lb. .21 - —
nat., bgs. lb. .15 - —
Salvadorian, Nat. bgs. lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .47 - —
dms., t.c.l. works lb .22 - .20½
bbls., 1,500-lb lots lb. .46 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c per lb higher for all packages.
Shellac, bleached refd. bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb lots lb. .57 - —
kgs., 1,500-lb lots lb. .58 - —
Shellac, orange lemon No 1, bgs., 10-bg lots lb. .37 - .39
lemon No 2, bgs. 10-bg lots, lb. .34 .37
superfine, bgs. 10-bg lots lb .32 .34
Shellac in 1 to 10-bg lots 1c per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., t.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., t.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., t.c.l., works lb. .07 .17
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton 25.00 —
bgs. t.c.l. works, ex whse ton 45.00 55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l. works ton 20.00 - —
bgs., t.c.l., works ton 25.00 - —
99½%, 140 mesh bgs., c.l., works ton 15.00 - —
bgs., t.c.l. works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .20 - —
tanks, works lb. .15 - —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Silver cyanide, bots. 1,000-oz. lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz lots oz. .96¼- —
Silver nitrate, CP cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots. 250-500 oz., same basis, oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, 16-oz. bots oz. 1.46 - —
Snakeroot oil, Canada, ens lb. 40.00 - 43.00
Soapbark, crushed, bls. lb. .35 - —
Powd., bls. lb. .40 - —
Whole, bls. lb. .25 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., t.c.l., stock pts., 100 lbs. 3.00 4.77
bulk, c.l., works 100 lbs. 1.60 —
Light, 58%, paper bgs., c.l., works 100 lbs 1.85 - —
paper bgs., t.c.l., stock pts. 100 lbs. 3.95 4.72
bulk, c.l., works 100 lbs. 1.55 —
Soda, caustic, flake, 76%, dms., c.l., works, frt equald 100 lbs 5.20 - —
liq. 50% sellers tanks works, dry basis 100 lbs. 2.90 - —
50% rayon type sellers tanks works, dry basis 100 lbs. 2.90 3.00
Soda, caustic, liq. 73%, sellers' tanks works dry basis, 100 lbs. 3.00 —
liq., 73% rayon type, sellers' tanks, works, dry basis lb. 3.00 3.10
solid, 76% dms. c.l., works, 100 lbs 4.80 - —
Soda, sal. conc. bgs. c.l. works, 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
bgs., t.c.l., same basis lb. .16½- —
NF, 60% gran. dms. c.l., works, lb. .15½- —
dms., t.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate bgs. c.l. dlvd. E lb. .27½- —
bgs., t.c.l. dlvd E lb. .29 - —
Sodium arsenate 60% arsenic pentoxide, 200 lb. dm. less than ton lots, f.o.b. works lb. .24 - —
ton lots or more same basis, lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 6.35 - —
less than 100-kilos kilo. 6.60 - —
Sodium benzoate tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., t.c.l. same basis lb. .39 - —
USP, dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb lots, same basis, lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l. works 100 lbs 2.95 - —
bgs., t.c.l. works 100 lbs 3.85 - —
USP, powd., bgs. c.l., works, 100 lbs 2.55 - —
bgs., t.c.l. works 100 lbs 3.45 - —
Sodium bichromate, gran., ngs., c.l., t.l., works lb. .13 —
bgs., t.c.l., works lb. .13½- .14¾
Sodium bichromate in dms. ¾c. per lb higher
Sodium bifluoride, fib. dms., c.l., works, frt. equald lb. .19½- —
fib. dms., t.c.l., same basis lb. .2025- —
Sodium bisulfate bulk c.l. works, 100 lbs 2.00 —
dms. c.l., frt. equald 100 lbs. 3.00 3.60
dms. t.c.l. frt equald 100 lbs. 3.50 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs 5.00 - —
bgs., t.c.l., works 100 lbs 5.45 - —
Soln., 35° bbls., c.l., works 100 lbs 1.70 - —
bbls. t.c.l works 100 lbs 2.20 - —
Sodium borate (see Borax)
Sodium borohydride powd., dms., c.l., works lb. 19.90 —
dms., t.c.l., works lb. 33.00 40.00
stabilized water soln., 12% NaBH, 100% basis, dms., works lb. 15.00 - —
Pelletized sodium borohydride 6¢ per lb. higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, crystal, monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., t.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., t.c.l., works lb. .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms. 20-dm lots or more, works lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., t.c.l., works lb. .28 - —
Sodium chromate, anhyd. fib. dms., c.l., t.l., works lb. .14¾- —
fib dms. t.c.l., works lb. .15¼- .16½
Tetrahydrate, bgs., c.l., t.l., works, lb. .1015- —
bgs., t.c.l. lb. .1065- .1190
Sodium citrate anhyd., 200-lb dm., f.o.b works E lb. .62 - —
NF VIII, gran. bgs., c.l., same basis lb. .26 - —
USP XIV, gran., bgs., c.l., same basis lb. .29 - —
Sodium citrate, USP, powd. prices ½c higher.
Sodium cyanate, dms. 1,000-lb. lots, works lb. .85 - —
dms. smaller lots, works lb. .90 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb lots lb. .176 - —
dms., same basis, 5,000 to 19,999-lb lots lb. .188 - —
dms., same basis, 1,000 to 4,900-lb lots lb. .198 - —
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 —
250-lb dms. c.l., works lb. .18¾- —
Tech. 33-35% acetic acid, dms., t.c.l., works lb. .15 —
250-lb dms., t.c.l., works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., t.c.l., t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs. smaller lots lb. .14¾- —
Sodium fluoride white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., t.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l., works, 100 lbs. 7.05 - —
bgs. t.c.l., ex whse 100 lbs 8.65 - —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b works E lb. .64 - —
Tech. bgs., c.l., t.l., same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b shipping point, lb. 2.20 - —
dms., 50-99 lbs. same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb 1.20 - —
dms., 1,000 lbs or more, same basis lb 95 —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms. c.l., frt. alld lb. 23½ —
dms. t.c.l. frt. alld. lb. 25¾- —
Sodium hydroxide, NF, pellets, 100-lb dms., 1 to 100-dm. lots, lb. 23½- .25
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite, NF, dms. 1,000-lb. lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 2.13 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., t.t.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 6.50
t.c.l., bgs., works 100 lbs. 4.40 7.00
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran., bgs. c.l. works ton 210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.30 - —
bgs., smaller lots, ex whse 100 lbs. 9.61 -11.61
Tetrahydrate, bgs., c.l., works, ton 210.00 —
bgs., ton lots, ex whse 100 lbs. 14.83 - —
bgs., smaller lots, ex whse 100 lbs. 16.08 -18.08
Sodium, metallic, bricks, c.l., works, lb. .21 —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld, lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs. 11.10 - —
bgs., t.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., t.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works, 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., t.c.l., works 100 lbs. 6.55 - —
Pentahydrate, bgs., c.l., works, 100 lbs. 4.45 - —
bgs., t.c.l., works 100 lbs. 4.80 6.75
dms., t.c.l., works 100 lbs. 4.95 - —
dms., t.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works frt. alld lb. .74 .76
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate monohydrated)
Sodium naphthionate, bbls. lb. .77 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton 48.00 - —
bulk, c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.40 - —
bbls., t.c.l., same basis 100 lbs. 11.40 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., t.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works 100 lbs. 5.65 - —
bbls., t.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 98%, bgs., works, 100 lbs. 12.35 - —
98% bgs., works 100 lbs. 15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., t.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., t.c.l., same basis lb. .26½- .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs. t.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd E. of Miss lb. .21½- —
dms., t.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms. lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l. frt equald 100 lbs. 8.10 - —
bgs., t.c.l., same basis 100 lbs. 8.50 - 9.55
Dibasic, cryst., bgs., c.l., t.l., frt. equald. 100 lbs. 4.75 - —
bgs., t.c.l., frt. equald 100 lbs. 5.15 - 5.90
Duohydrate, bgs., c.l., frt. equald 100 lbs. 7.75 - —
bgs., t.c.l., same basis 100 lbs. 8.25 - —
Monobasic, anhyd bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., t.c.l., same basis 100 lbs. 9.55 -10.15
Tribasic, anhyd. bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., t.c.l., frt. equald 100 lbs. 9.60 -10.20
Sodium phosphate in dms. 60c. to 80c. higher than bgs
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20½
Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms. dlvd E of Rockies, lb. .37 - —
Prices W of Rockies 3c. per lb. more.
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate, acid, bgs., c.l. works, frt equald. 100 lbs. 11.25 - —
bgs., t.c.l., same basis 100 lbs. 12.00 -12.50
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms. t.c.l. works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.55 - —
bgs., t.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate USP dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs., dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
t.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
dlvd. zone 2 100 lbs. 4.35 4.60
dlvd. zone 3 100 lbs. 4.75 4.90
dlvd zone 4 100 lbs 5.35 5.60
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La. and Miss. south of 31°; Tex. E. of 100°; S of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No of 31°; (3) Ark. W of 96°, Kan., Neb W. of 98° N D, Okla., S. D., Tex., W of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso, Tex.
Sodium sesquisilicate, anhyd., bgs., c.l. t.l. works 100 lbs. 5.70 - —
dms. c.l. t.l., works 100 lbs. 6.20 - —
hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms. 6,000-19,900 lb lots, works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be., 1:3.2, turbid dms., c.l., works, 100 lbs. 1.65 - —
dms., t.c.l., works 100 lbs. 1.90 2.40
tanks, works 100 lbs. 1.20 —
47° Be. 1:2.9.9. turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., t.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. 1:2.4. turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., t.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1.3.2. bgs., works ton 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., t.c.l., works lb. .725- —
Sodium silicofluoride in dms., 0.4c. per lb. higher
Sodium stannate, dms., works, frt. alld. E. lb. .754 - —
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls. works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd. bgs., c.l., dlvd. E. ton 56.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton 38.00 - —
bulk, c.l., works ton 34.00 - —
USP cryst. fib dms lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms. c.l. works, frt. equald lb. .07¼- —
dms., t.c.l., same basis lb. .08¼- —
Liq. 40-44% tanks, works, 100% basis ton 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms. t.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls. t.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs., t.l. same basis 100 lbs. 4.00 - —
Powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs. t.c.l. same basis 100 lbs. 7.95 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½- —
dms., t.c.l. same basis lb. .05½- —
Sodium thiocyanate, purified, cryst., 250-lb. dms lb. .80 - —
Tech., anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate NF, cryst. bbls. lb. .13½- —
Tech., anhyd. 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs. t.c.l., t.t.l., frt. equald 100 lbs. 8.15 - —
photograde, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb. bgs. t.c.l., t.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb. bgs., t.c.l., t.t.l., frt. equald 100 lbs. 5.30 - —
Sodium titanate, ctns., c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb. cns., c.l., frt. alld. E lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
bgs., t.c.l., same basis 100 lbs. 8.65 - —
bulk, hopper cars, same basis, 100 lbs. 7.35 - —
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.95 - —
bgs., t.c.l., works 100 lbs. 9.70 -13.13
dms., c.l., works 100 lbs. 9.45 —
dms., t.c.l., works 100 lbs. 10.20 -10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., dlvd lb. .22½- —
dms., t.t.l., same basis lb. .23 - —
Sodium-zirconyl sulfate, fib dms., 1,000-lb lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360° F b.r., 14° 16° C m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355° 420° F. b.r., 17°-18° C. m.a.p., tankcars, New Jersey and New York, gal. .30 - —
Houston, Texas gal .30 - —
Partial aromatic, 211°-265° F b.r., 31° C m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340° F. b.r., 22° C. m.a.p., tankcars, New Jersey and New York gal. .275 - —
319°-380° F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322-395° F b.r., 28° C m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate fib dms., 20,000-lb. lots, works lb. .33½- —
10,000 to 20,000-lb. lots, works, lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., t.c.l. works lb. .19 - —
tanks, works lb. .16½- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb. .25 - .26
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., coml., aqueous, dms., c.l., works lb. .26 - —
dms., t.c.l., works lb. .27 - —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., t.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., t.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted Decatur ton 64.00 - —
Soybean oil, crude, tanks, Decatur, lb. .11¾- —
Foots, soapstock acid 95%, tanks, New York lb. .07⅛ Nom.
Soybean oil, alkali, refd., dms. lb. .1605- .1630
tanks lb. .1405- —
Clarified, dms. lb. .1505- .1530
tanks lb. .1305- —
Salad, refd., dms. lb. .16½- .16¾
tanks lb. .14½- —
Soybean oil acids, dbl. dist., dms., lb. .16¾- .19¼
tanks lb. .14¼- —
S. D., dms lb. .15½- .18
tanks lb. .13 - —
Sparteine sulfate, cns., 100 oz. or more oz. .80 - —
Spearmint leaves, dom. bls lb. .75 - —
Spearmint oil, NF, dms lb. 5.25 - —
Sperm oil, bleached winter, 45°, dms lb. .1675- .1775
tanks lb. .1475- —
Nat., winter 45°, dms lb. .1575- .1675
tanks lb. .1375- —
Spermaceti wax, blocks, cs lb. .32 - .33
Cakes, cs. lb. .33 - .34
Spruce oil, cns., dms. lb. 2.10 - 3.55
Squill, white, bls. lb. .16 - .18
Powd., bbls., bxs. lb. .17 - .20
St John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .864 - .886
Stannous oxide, dms., dlvd. lb. 1.73 - 1.80
Stannous chloride, anhyd., dms. lb. 1.329 - 1.429
Stannous sulfate, works lb. 1.185 - 1.205
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. lb. .60 - .61
Stearic acid, dbl., pressed, bgs lb. .18 - .21¼
Single-pressed, bgs. lb. .17½- .20
Triple-pressed, bgs. lb. .19¾- .22¼
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs. lb. .16½- .18
Streptomycin sulfate, bulk gram. .03 - —
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .33 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, fib. dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb lots lb. 3.57 - —
Strontium nitrate, bgs., c.l., works, 100 lbs. 11.00 - —
bgs., t.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works, ton 56.70 -66.15
Strophanthin G (see Quabain, USP).

Strophanthin K, bots.	oz.	25.00	-45.50
Strophanthus sued, Kombi, biologically tested, bgs.	lb.	2.50	- 3.00
Styrax gum, USP, cs.	lb.	4.50	- 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd.	lb.	.17	- —
dms., l.c.l., same basis	lb.	.19	- —
tanks, frt. equald.	lb.	.13	- —
Tech., 99.2%, dms., c.l., dlvd.	lb.	.15	- —
dms., l.c.l., same basis	lb.	.17	- —
tanks, frt. equald.	lb.	.1099-	—
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor.			
Styrolyl acetate, bots.	lb.	1.03	- 1.10
Succinic acid, purif., cryst., dms., t.l., frt. alld.	lb.	.62	- —
dms., l.t.l., same basis	lb.	.63	- .75
Succinic anhydride, dms., c.l., t.l., dlvd.	lb.	.51	- —
dms., l.c.l., same basis	lb.	.52	- —
Sucrose, refd., white, bgs., refy	lb.	.0940-	—
Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd	lb.	.33½-	—
dms., l.t.l., same basis	lb.	.35	- —
tanks, same basis	lb.	.31	- —
100%, t.l., dms., dlvd.	lb.	.35½-	—
l.t.l., dms., same basis	lb.	.37	- —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works	lb.	1.00	- —
Sugar (see Sucrose).			
Sugar cane wax, dom., refd., slabs, 80-lb. ctns., works	lb.	.60	- .65
80-lb ctns. spot	lb.	.65	- .75
Sulfabenzamide, dms.	kilo	8.80	9.90
Sulfabenzamide-sodium, dms.	kilo.	9.00	-10.10
Sulfacetamide, USP, fib. dms	kilo.	6.61	- 6.83
Sulfacetamide-sodium, USP, fib. dms	kilo.	8.15	- 9.25
Sulfadiazine, USP, microcrystals, dms	kilo.	23.35	-24.45
USP, powd., dms.	kilo.	22.60	-23.70
Sulfadiazine-sodium, USP, dms	kilo.	24.80	-25.90
Sulfaguanidine, NF X, dms	kilo.	5.50	6.60
Sulfamerazine, USP, microcrystals, dms.	kilo.	23.50	- —
Sulfamerazine-sodium, USP, powd., dms	kilo.	24.80	25.90
Sulfamethazine, USP XV, microcrystals, dms	kilo.	19.65	-20.75
USP XV, powd., dms.	kilo.	18.75	-19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.		16.00	—
dms., l.c.l., l.t.l., works 100 lbs.		17.50	18.50
Gran., dms., c.l., t.l., works. 100 lbs.		14.75	—
dms., l.c.l., l.t.l., works 100 lbs.		16.25	-17.25
Sulfanilamide, NF, reg., 1,000 lb., fib. dms., frt. equald.	lb.	1.75	- —
NF, reg., smaller lots, fib. dms., frt. equald.	lb.	1.80	- —
Sulfanilamide quinoxaline, veterinary, dms	kilo.	16.28	- —
Sulfanilic acid, tech., dms., c.l., frt. alld	lb.	.21	- —
dms., l.c.l., frt. alld	lb.	.23	- —
Sulfapyridine, USP XV, powd., bots., tins	kilo.	15.45	-16.55
Sulfapyridine-sodium, monohydrate, dms	kilo.	16.55	-17.65
Sulfathiazole, NF X, microcrystals, dms	kilo.	6.25	6.90
NF X, powd., dms.	kilo.	5.50	6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more	lb.	2.33	- —
Sulfur, coml., flour, bgs., mines.	100 lbs.	2.35	- —
bbls., mines	100 lbs.	3.30	- —
lump, bgs., mines	100 lbs.	2.25	- —
bbls., mines	100 lbs.	2.80	- —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines	long-ton.	23.50	- —
export, f.o.b. vessels, Gulf ports.	long-ton.	25.00	- —
US and Canada, f.o.b. vessels Gulf ports	long-ton.	25.00	- —
Domestic dark sulfur prices are $1 per long-ton lower.			
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos	long-ton.	24.00	- —
Mexican dark sulfur price is $1 per long-ton lower.			
Sulfur, refd., flowers, NF, bgs., mines	100 lbs.	5.65	- —
bbls., mines	100 lbs.	7.00	- —
flour, light, bgs., mines	100 lbs.	5.25	- —
bbls., mines	100 lbs.	6.25	- —
lump, bgs., mines	100 lbs.	4.95	- —
rolls, bgs., mines	100 lbs.	5.50	- —
bbls., mines	100 lbs.	6.25	- —
salt block, bgs., mines	100 lbs.	4.65	- —
virgin block, bbls., mines	100 lbs.	4.70	- —
Sulfur, rubbermakers, coml., reg., bgs., mines	100 lbs.	2.45	- —
bbls., mines	100 lbs.	3.70	- —
98-100%, pashing through mesh, bgs., mines	100 lbs.	2.55	- —
bbls., mines	100 lbs.	2.80	- —
Refd., bgs., mines	100 lbs.	4.90	- —
bbls., mines	100 lbs.	6.05	- —
treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.75	- —
bbls., mines	100 lbs.	4.00	- —
Sulfur dichloride, ret. dms., c.l., works, frt. equald.	lb.	.05½-	—
ret. dms., l.c.l., same basis	lb.	.06¾-	—
tanks, same basis	lb.	.04½-	—
Sulfur dioxide, liq., coml., cyls., works, frt. equald.	lb.	.10	- .13
multi-unit cars, works	lb.	.0535-	—
tanks, works	lb.	.045	- —
refrigeration, cyls., dlvd.	lb.	.33	- —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald.	lb.	.05½-	—
dms., l.c.l., same basis	lb.	.06¾-	—
tanks, same basis	lb.	.04½-	—
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs.		2.00	- —
cbys., l.c.l., works 100 lbs.		2.30	- —
tanks, works	ton.	18.60	- —
66°Be, cbys., c.l., works 100 lbs.		2.25	- —
cbys., l.c.l., works 100 lbs.		2.55	- 3.35
tanks, works	ton.	22.35	- —
98%, tanks, works, East	ton.	23.50	- —
99%, tanks, works, East	ton.	23.70	- —
100%, tanks, works, East	ton.	23.95	- —
Sulfuric acid, California works, tanks	ton.	26.45	- —
CP, NF, consumers' cbys., c.l., frt. equald	lb.	.12¾-	—
Sulfuric acid, CP, NF, consumers' cbys., l.c.l., same basis	lb.	.14¼-	.14¾
5-pt. bots., extra, cs., c.l., works, frt. alld	lb.	.16¼-	—
5-pt. bots., extra, cs., l.c.l., same basis	lb.	.17¼-	.18¼
Sulfuric acid, fuming (oleum), 20%, tanks, works	ton.	25.00	- —
40%, tanks, works	ton.	29.00	- —
65%, tanks works	ton.	39.50	- —
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore	unit-ton.	.90	- .93
bulk, c.l., Carteret, N. J.	unit-ton.	.90	- .93
Superphosphate, triple, 45% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla.,	unit-ton.	1.00	- —
bulk, f.o.b. vessel at Fla.	unit-ton.	1.05	- —
Sweet birch oil, USP, northern, cns.	lb.	4.00	- 9.50
USP, southern, cns.	lb.	2.00	- 3.05

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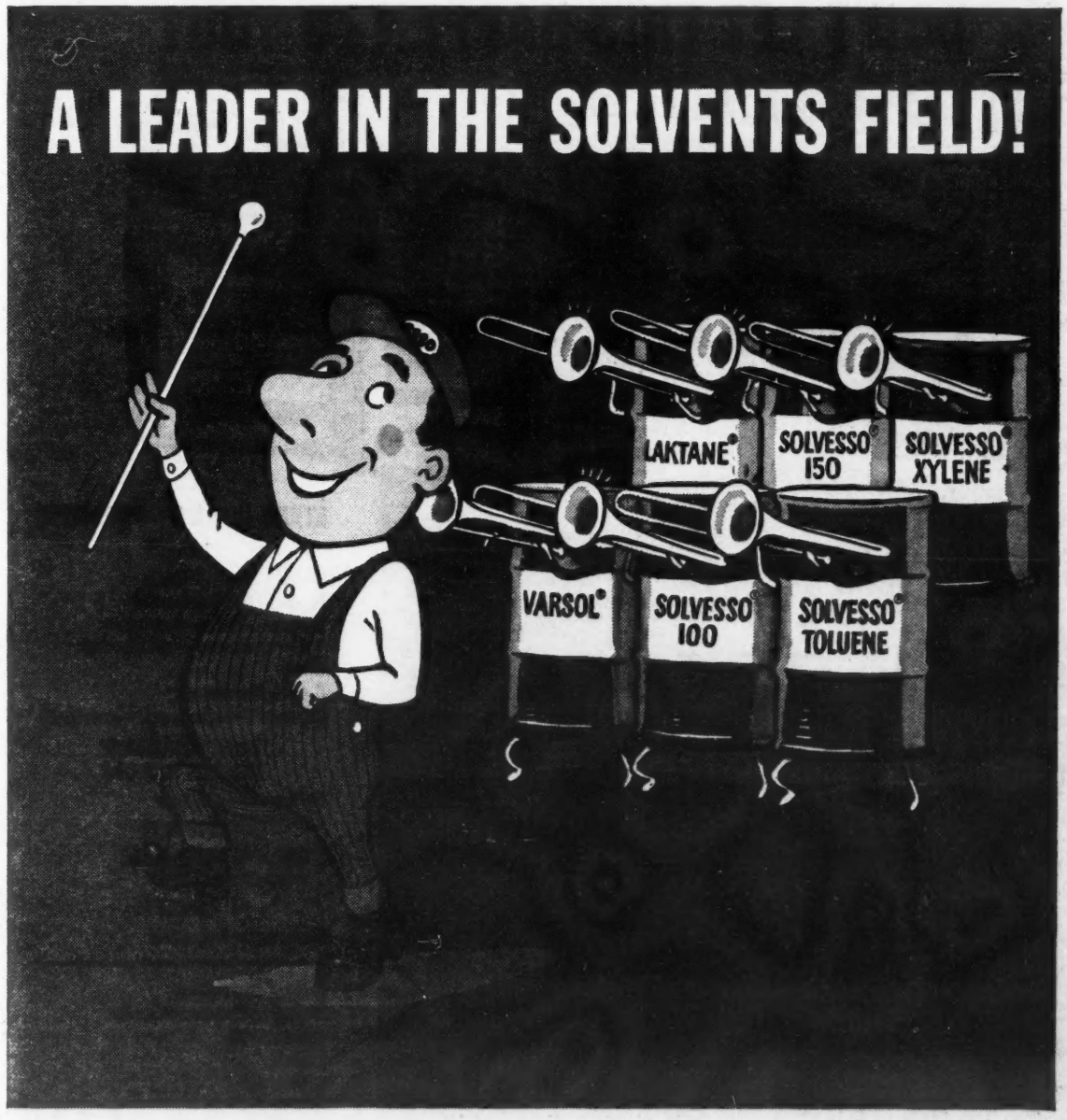
2,4,5-T, dms., c.l., works, frt. equald.	lb.	1.18	- —
dms., l.c.l., same basis	lb.	1.25	- —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald.	lb.	1.24	- —
dms., l.c.l., works	lb.	1.29	- —
Talc, dom., fibrous, grd., bgs., c.l., works, New York	ton.	28.00	- —
bgs., l.c.l., works	ton.	31.00	-36.00
Talc, dom., fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York	ton.	31.00	- —
bgs., l.c.l., works	ton.	34.00	- —
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l. works	ton.	38.00	- —
625 mesh, micronized, bgs., c.l., works	ton.	80.00	- —
Talc, dom., grd., Calif., grd., bgs., c.l., works	ton.	34.00	-39.50
Vermont, off-color, grd., bgs., c.l., works	ton.	19.40	- —
bgs., l.c.l., works	ton.	37.00	- —
imp., Canadian, grd., bgs., c.l., mines	ton.	20.00	-35.00
tanks, works	lb.	.02½-	.03⅛
Tall oil, crude, tanks, works	lb.	.03¼-	—
Acid, refined dms., c.l., works	lb.	.08¾-	.10
tanks, works	lb.	.07½-	.08¾
Dist., depending on grade, dms., c.l., works	lb.	.07½-	.08¾
tanks, works	lb.	.06	- .08
Tall oil fatty acids, less 2% rosin acid, dms., c.l., works	lb.	.08	- .11¼
tanks, works	lb.	.06	- .09¼
2-6% rosin acid, dms., c.l., works.	lb.	.07	- .08
tanks, works	lb.	.05	- .06
Tallow, edible, tanks, dlvd.	lb.	.09¼ Nom.	
Inedible, fancy, bleachable, tanks,	lb.	.06¾-	—
fancy, guaranteed, bulk, f.o.b. steamer	lb.	.07¼-	.07⅝
dms., f.a.s.	lb.	.08¼-	.08⅜
tanks, dlvd.	lb.	.07	- .07⅛
No. 1, dlvd.	lb.	.06½-	—
Prime, tanks, dlvd.	lb.	.06⅝-	—
Special tanks, dlvd.	lb.	.06½-	—
Sulfonated, 25%, bbls., l.c.l.	lb.	.08½-	.08¾
50%, bbls., l.c.l.	lb.	.10½-	.11
Tallow acids, dist., dms.	lb.	.14½-	.17
tanks	lb.	.12	- —
Hydrogenated, dms.	lb.	.16¾-	.19¼
Tallow oil, acidless, dms., c.l.	lb.	.14	- —
dms., l.c.l.	lb.	.16	- —
tanks	lb.	.12½-	—
Tangerine oil, Florida, dms.	lb.	4.75	- —
Tankage, animal, feeding, 9-11% ammonia, New York bulk,	unit-ton.	4.75	- 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots	lb.	2.05	- —
bbls., smaller lots	lb.	2.06	- 2.07
powd., bbls., 1,000-lb. lots	lb.	1.95	- —
bbls., smaller lots	lb.	1.96	- 1.99
Tech., dms.	lb.	1.05	- —
Tansy oil, dms.	lb.	6.60	- 8.00
Tar acid oil, 15-18%, dms., c.l., dms., l.c.l., same basis	gal	55½	- —
tanks, same basis	gal	43½	- —
25-28%, dms., c.l., frt. equald	gal.	53½-	—
basis	gal	60	- —
dms., l.c.l., same bams	gal	62	- —
tanks, same basis	gal	50	- —
50-53%, dms. c.l., same basis	gal	75	- —
dms., l.c.l., same basis	gal	77	- —
tanks, same basis	gal	65	- —
Tar, coal (see Coaltar).			
Tartar emetic (see Antimony potassium tartrate).			
Tartaric acid NF 100-lb bgs., c.l., frt. equald	lb	41	- —
bgs., 10,000 lbs. 1 shipt., same basis	lb	43	- —
bgs., smaller lots, same basis	lb	47	- —
Terpine hydrate, NF, cryst., powd., 100-lb fib. dms	lb.	70	- —
Terpineol, extra, dms	lb	.50	.60
Prime, dms.	lb	.40	.50
Terpinyl acetate, extra, cns., dms.	lb.	.64	.73
Prime, dms	lb.	.53	.58
Terpinyl propionate, dms	lb.	1.65	1.70
Testosterone, USP, bots	gram.	No prices.	
Testosterone propionate, USP bots.	gram	No prices.	
Tetrachloroethane, dms. works	lb	14½	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate).			
Tetrachloroethylene, tech. (see Perchloroethylene).			
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works	lb.	.20½-	—
dms., l.c.l., works	lb.	.22	- .23½



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ESSO STANDARD, DIVISION OF
HUMBLE OIL & REFINING COMPANY Esso

Tetraethyl Orthosilicate—Triethyl Citrate

Tetraethyl orthosilicate, dms., c.l., dlvd E lb. .60 - —
dms., l.c.l., dlvd. E lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd E lb. .55 - —
tanks, dlvd E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or t.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .25½- —
dms., l.c.l., Memphis, Tenn. lb. .26½- —
dms., c.l., t.l., Newark, N.J. lb. .27½- —
Tetrahydrofurfuryl alcohol, dms., l.c.l., Newark, N. J. lb. .28½- —
tanks, dlvd. E. of Denver lb. .25 - —
tanks, dlvd. W. of Denver lb. .26 - —
Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E lb. .39 - —
l.c.l., t.t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, dlvd lb. 7.50 -10.00
Thallium sulfate, 99%, bots., dlvd. lb. 5.00 -10.00
Theobromine, NF, fib. dms., 100-lbs., f.o.b., works lb. 4.10 - 4.15
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works lb. 6.45 - —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works. lb. 3.80 - —
Theophyline, USP, anhyd., 100-lb. dms., frt alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt alld kilo. 36.00 - —
USP, ampule grade, fib., dms., frt. alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib. dms., frt. alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots lb. .76 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb 5.20 - —
Tungstated, PTMA, kgs., works lb 6.20 - —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, dms., 25 kilos, works, kilo. 115.00 - —
Thyme leaves, French, triple sifted extra, bgs. lb. .27 - —
Spanish, extra, bgs. lb. .12 - —
triple sifted, bgs. lb. .25 - —
Spanish, bgs. lb. .09 - —
Thyme oil, NF, red, cns., dms. lb. 3.35 - 3.60
NF, white, cns. lb. 3.60 - 3.95
Tech., white, cns. lb. .80 - 1.10
Thymol, fib. dms., 25-lbs., f.o.b. works lb. 2.45 - —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works lb. 7.30 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. 1.13 - —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd. lb. .26½- —
reg., bgs., c.l., dlvd. lb. .25½- —
bgs., l.c.l., dlvd. lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla. ton. 180.00 - —
Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y. ton. 205.00 - —
bgs., ton lots, same basis. ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .28½- —
Titanium dioxide-calcium pigment, 20% TiO_2, reg., bgs., c.l., dlvd lb. .09¾- —
bgs., l.c.l., works lb. .09¾- —
50% TiO_2, high-tinting, dms., c.l., lb. .14½- —
dms., l.c.l. lb. .14½- —
Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, dms., c.l., t.l., 20,000 min., f.o.b. plant, frt. alld. E lb. .81 - —
dms., l.c.l., l.t.l., 5,000 lbs- 19,999 lbs., same basis lb. .81½- —
dms., l.c.l., .l.t.l., less than 5,000 lbs., same basis lb. .84 - —
For west coast delivery add 2c. per lb.
d-a-Tocopherols, NF, mixer, conc., pure basis, bots. kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 - —
dl-a-Tocopherol, bots. kilo. 99.00 - —
dl-a-Tocopheryl acetate, bots kilo. 90.00 - —
25% dry, powd., bots kilo. 22.50 -24.00
33% dry, powd., bots. kilo. 30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste, kgs., 100% basis lb. 1.50 - —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb. 1.50 - —
Tolu balsam, cns. lb. 4.00 - —
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. .25½- —
Toluene, petroleum, indust., tanks, f.o.b., frt. equald gal. .25 - —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb. .16 - —
1,000-lb. or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb. .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., l.c.l., same basis lb .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms., frt. alld. lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs. works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt alld lb. 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - —
Brazilian, Surinam, cs. lb. 1.30 - —
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .22 - —
dms., l.c.l., t.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 - 4.20
No. 2, cs. lb. 3.75 - 3.80
No. 3, cs. lb. 3.40 - 3.65
USP, powd., bbls. lb. 1.05 - 1.15
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .38 - —
dms., l.c.l., same basis lb. .39½- —
tanks, same basis lb. .35½- —
Trialkylamine, dms., c.l., dlvd lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver, lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld. E of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms. l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin dms. l.c.l. dlvd. lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b works lb. .52 - —
USP, 100-lb dms., frt. equald lb. 1.25 - —
Trichlorobenzene dms. c.l. frt. alld. E lb. .15 - —
dms., l.c.l. frt. alld. E. lb. .16 - —
tanks, frt. alld. E. lb. .13¼- —
Trichlorobenzene prices in the West 1¼c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .12¼- —
1,1,2 Trichloroethane, dms., c.l., works lb. .15½- —
dms., l.c.l., works lb. .16¼- —
tanks, works lb. .13½- —
Trichloroethylene dms., c.l., or t.l., dlvd lb. .12½- —
dms., l.c.l., dlvd. lb. .14 - .14½
tanks, dlvd. lb. .11¼- —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 - —
dms. l.c.l. same basis lb .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., non-ret. dms., 1 dm. frt. equald kilo. 3.10 - —
Tricresyl phospnate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Petroleum, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .22½- —
dms., l.c.l., dlvd. E lb. .24 - —
tanks, dlvd. E lb. .20 - —
Triethanolamine, dms., c.l., dlvd. E. lb. .24½- —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l., frt. alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine, dms., c.l., dlvd. E. lb. .50 - —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .47¼- —
tanks, frt. alld. E. of Denver. lb. .43¼- —

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NOTICE OF JUDGMENT UNDER SECTION 705 OF THE FEDERAL FOOD, DRUG, AND COSMETIC ACT
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B-Complex Extract
Brewers' (Saccharomyces cerevisiae)

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Yellow—Red Orange

ENZYMES

T.S. 3 for Greasetrap and Septic Tanks

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Norwegian Kelp Meal

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Digestive Pharmaceuticals
Chlorophyll
Phytol
Carotene
Xanthophyll
Anti-Oxidant (BHT)
Hydropoid

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220 East 42nd St., New York 17, N. Y.

Triethyl phosphate, dms., c.l., divd. lb. .40½- —
dms., l.c.l., divd. lb. .42 - —
tanks, divd. lb. .36 - —
Triethylene glycol, dms., c.l., divd. E lb. .21 - —
dms., l.c.l., divd. E lb. .23½ —
tanks, divd. E lb. .18½- —
Triethylenetetramine, dms., c.l., divd. E lb. .51½- —
dms., l.c.l., divd. E lb. .53 - —
tanks, divd. E lb. .49 - —
Trilsobutylene, tanks, divd. lb. .08 - —
Tri-isopropanolamine, dms., c.l., divd. E lb. .23½ —
dms., l.c.l., divd. E lb. .24½ —
tanks, divd. E lb. .20¾ —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, frt. equald, 100% basis, lb. .26 - —
Trimethylamine, anhyd., 25-40% soln.,, dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethyloipropane, dms., c.l., t.l., divd. E lb. .30½- —
dms., l.c.l., l.t.l., same basis lb. .31½- —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., divd. E lb. .34 - —
bgs., l.c.l., l.t.l., divd. E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½- —
bbls., l.c.l., frt. equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene, dms., c.l., divd. E gal. .44 - —
dms., l.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .20½- —
dms., l.c.l. t.l.t. frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt alld. E lb. .17½- —
tankwagon and compartmented, tankwagon, 1,000 gals., min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Trypophane, dms., 1 kilo, works. kilo.154.00 - —
Tung oil, dms., New York lb. .26¾- .27
tanks, imported lb. .25¼- .25½
tanks, domestic, mills lb. .25 Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 - —
Tungstic acid tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works lb. 2.45 - —
Turkey red, bbls., works lb. .52 —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .38 .50
Tuscan red, bbls., frt. equald lb. .28 .32
Tyrothricin, USP, 1 to 5 kilos gram. .50 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb bbls., divd. E. of Rockies lb. .30½- .33
Jobbing types, dry, bbls., same basis lb. .18 - .22½
Regular types, dry bbls., same basis lb. .16 - .37½
Ultramarine blue prices 1c higher W of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½ .07¾
bgs., l.c.l. works lb. .07¾ .08
turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N.Y. lb. .08¼- —
Raw, American, bgs, works lb. .07¾ .08¼
Turkey-type bgs., works lb. .08½- .08¾
Undecylenic acid 55-gal dms., f.o.b. works lb. 1.38 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea 46% N indust. bgs., c.l., t.l., f.o.b. plant ton.100.00 - —
Feed grade, c.l., t.l., f.o.b. plant. ton.95.00 - —
45% N, agricultural, bgs., c.l. f.o.b plant ton.92.50 - —
Bulk, c.l., t.l., same basis ton.86.50 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 - —
37 grade, tanks, same basis ton.145.00 - —
Urethane, USP dms. t.l., f.o.b., works lb. .65 - —
dms., l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls lb. .12 - —

V

Valerian root, Belgian bgs. lb. .32 - —
Indian, bgs lb .25 - —
dl-Valine, dms., 1 kilo, works kilo.37.00 - —
Vanadium pentoxide, tech. dms. works lb. 1.38 - —
Vandyke brown bbls. works lb. 18½ 12
Vanilla beans, Bourbon, tins lb. 7.00 - 7.15
Mexican cuts, tins lb. 7.10 - 7.40
whole, tins lb. 7.40 - 7.80
Vanillin ex ugnin, 100-lb. fib. dms., 2,000-lb. lots or more lb. 3.00 - —
less than 2,000 lbs lb. 3.20 3.30
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 - —
35%, bgs., works lb. .0625- —
40%, bgs., works lb .0675- —
Vetiver oil, Bourbon, cns lb.17.00 -17.25
Haitian, cns. lb.12.00 -14.00
Victoria blue toner, molybdated, PMA 250-lb. bbls., divd. E. of Rockies lb. 4.50 4.95
Tungstated, PTMA, 250-lb. bbls., divd. E. of Rockies lb 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., divd lb. .1810- —
55-gal. dms., l.c.l., divd lb. .1960- —
tanks, divd. lb. .1560- —
tanktrucks less than 4,000 gal., divd lb. .1610- —
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works, min. frt. equald E. lb. .0896- —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot 1.13 - —
bots. 75cc. hospitals bot 1.56 - —
Vinyl ethyl ether tech. dms., c.l., works lb. .30¼- —
dms., l.c.l., works lb. .31 - —
tanks, works lb. .28¼- —
Vinyl propionate monomer, dms. c.l., divd lb .48 - —
dms. l.c.l., same basis lb 50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 - —
1 to 9 dms., works lb. 1.25 - —
tanks, works lb. 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., dest. frt. paid, Zone 1 lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14 - —
Zone 2 prices are 1c. per lb. higher.
Zone 1 is East of Rockies, Zone 2 is West of Rockies.
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 - —
Vitamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 - —
325,000 units per gram, same basis kilo.43.88 - —
250,000 units per gram, same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.45.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram. .57 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms. gram. .57 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram.52.00 - —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.52.00 - —
0.1% trituration of cyanocobalamin, USP, with dicalcium phosphate or mannitol gm.52.00 - —
USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram.52.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld. gram. .57 - —
Vitamin B_{12}, 0.1% cobalamin concentrate in gelatin, 1-10 kilo, dms., frt. alld. gram. .57 - —
Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram less than kilo lots kilo.45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. lb. 2.00 2.25
Warfarin, 0.5%, dms., 50-lb. lots, divd lb 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb 2.05 - —
dms., 5-24-lb. lots, New York or Chicago lb 2.15 - —
Watchung-type reds., bbls lb. 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb .21 - .23
White precipitate, USP, powd., dms., 100 lbs. f.o.b. works lb 3.50 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .30 —

—Continued on page 40

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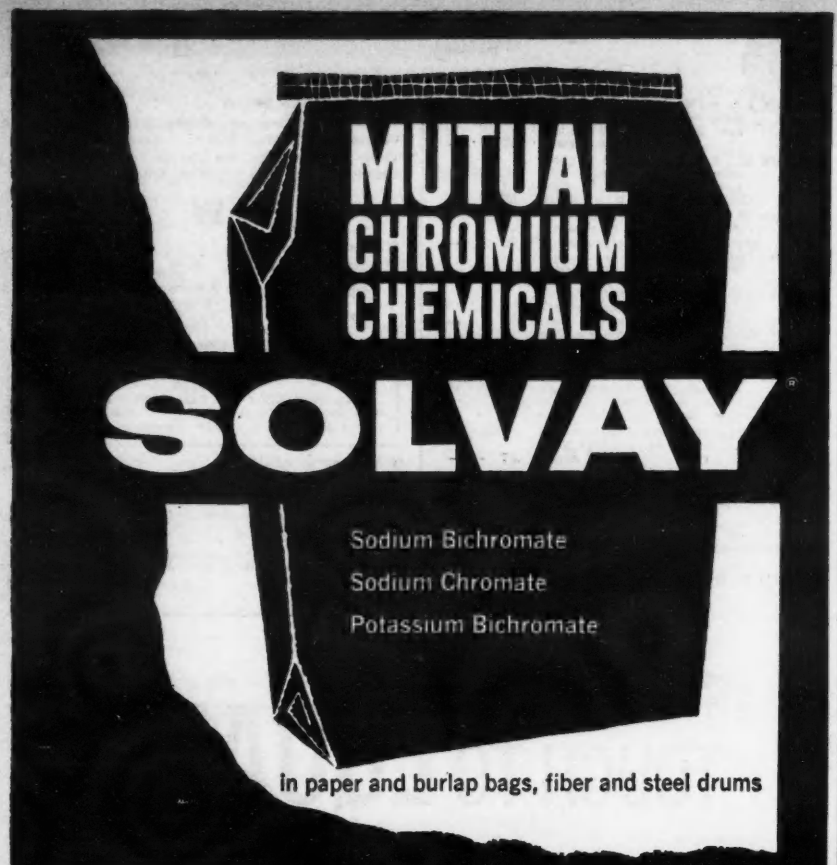

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Bromine-Based Fire Fighter Is Set To Repeat 1960 Sales Performance

If bromofluoromethane could hit the commercial market this year, where small pleasure craft have been sighted as the most promising outlet, sales of the material would better last year's estimated volume of 300,000 to 350,000 pounds. Last year the only large volume maker of this bromine-based fire extinguishant reported sales at somewhat under 300,000 pounds, or nearly double the 1959 volume. A single order by the Army Corps of Engineers for 90,000 extinguishers, using two to three pounds of bromofluoromethane each, accounted for the bulk of sales. Other shipments went to commercial airlines for extinguishers on jet planes.

Besides the commercial market, where the material's debut is being held up for approval by insurance underwriters, the trade is looking toward military tanks as another big volume outlet. The army is reportedly contemplating a switch from the carbon dioxide equipment now used.

But since neither of these developments would have much impact in 1961, sales equal to last year's are anticipated.

Both tanks and pleasure craft would represent a major departure in the marketing pattern of bromofluoromethane. Heretofore, because of its high cost, it has been used exclusively in portable equipment, but now "space savings" has become another telling sales point.

Weight Factor Significant

Because of its vastly superior fire-fighting efficiency, bromofiuromethane requires equipment weighing only about one-third that of a CO_2 unit. For portable equipment, the army has been willing to overlook its higher price, when it means a piece of equipment weighing only six pounds as against one weighing eighteen pounds.

But with the price of the extinguishant reduced from $4.25 to $3.25 last December, coupled with the cost savings in lighter-weight equipment, the overall price has been pared closer to that of a CO_2 unit, and the army as well as civilian boat owners can be pursuaded that it's worth paying a little more to conserve space.

When the market cracks a million pounds a year, trade sources anticipate a price of about $2 a pound for the extinguishant.

After that the material could move in everywhere, since it's figured that the total cost of the equipment and the chemical are equal to that of a CO_2 unit when bromofiuoromethane sells for $2 as against the present price of CO_2.

Back in 1959, the Corps of Engineers first weighed the supply position of bromine before committing themselves to the new extinguishant.

They noted that high octane fuels then using bromine were being replaced by diesel and jet fuels, and decided that this overflow of material would assure ample supply.

So the outcome of bromofiuoromethane's commercial push will be watched eagerly by bromine producers. Sales of a million pounds a year would absorb substantial quantities of bromine —more than enough to compensate for its loss in the high octane fuel column.

Acids

Hydrochloric—With the gradual upturn of steel operations, hydrochloric acid producers have seen their sales charts much imprved over those of two or three months ago. But supply still is running more than ample, and prices show no tendency to firm up. Specialty accounts, such as food processing and oil well treatment, are moving at a good rate.

Molybdic—Price will be raised 10c. a pound on contract July 1 to reflect the higher tab on molybdenum metal. Under the new schedule, quantities up to 1,999 pounds are quoted at $1.25, 2,000 to 5,999 pounds at $1.19, 6,000 pounds to a truckload at $1.17, and truckloads at $1.15. All shipments are in 400-pound fiber drums.

Sulfuric—Demand curve continues upward with the steady recovery of steel business. Chemical accounts also are more active. Prices in the east coast market remain as previously, reflecting the competitive situation long prevailing there and ample supply.

Steel production during the week ended June 3 totaled 2,052,000 tons, off only slightly from the previous week's 2,077,000 tons, American Iron & Steel Institute reports.

Steel output to date this year stands at 37,141,000 tons, as compared with 53,606,000 tons during the comparable period of 1960.

Price Trends

Advanced

Tin metal (Straits), 1¾c. per lb
Salts, 1c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	June 10, 1960
106.85	106.85	106.81	106.88

For Current Prices See Page 10

Bases and Salts

Caustic Soda—Continued lag of the paper industry constitutes the one disappointing area in what has otherwise been a good spring season for caustic soda, trade sources report. Prices remain unchanged at long established levels, which would be a strain on profit margins were it not for the good strength shown by chlorine.

Chlorine — Organic chemical business wasn't all that it should have been during the spring season, one trade source reports, sales being off slightly in line with general business conditions. Nor did paper industry demand come up to expectations. Prices of chlorine have been unchanged since a year ago, when a moderate advance hit the books. Supplies are amply available.

Molybdenum Trioxide — Price will be advanced 17c. to $1.95 a pound on July 1 to reflect the higher cost of molybdenum metal. Shipments are in 400-pound fiber, polyethylene-lined drums.

Sodium Molybdenum — With higher molybdenum, prices of this material will be marked up 10c. a pound on contract July 1 to a range of $1.62 to $2.19 a pound, as to quantity and container.

Soda Ash—Material is moving in good volume to a seasonally active glass industry, trade sources report.

Nonferrous Metals

Aluminum—Purchased aluminum-base scrap receipts in January totaled 28,857 short tons, down 2 percent from December, the Mines Bureau reports. Shipments of finished ingot showed an increase of about 2,700 tons over the previous month. Independent smelters used 24,772 tons, or 82 percent of the total scrap consumed in January.

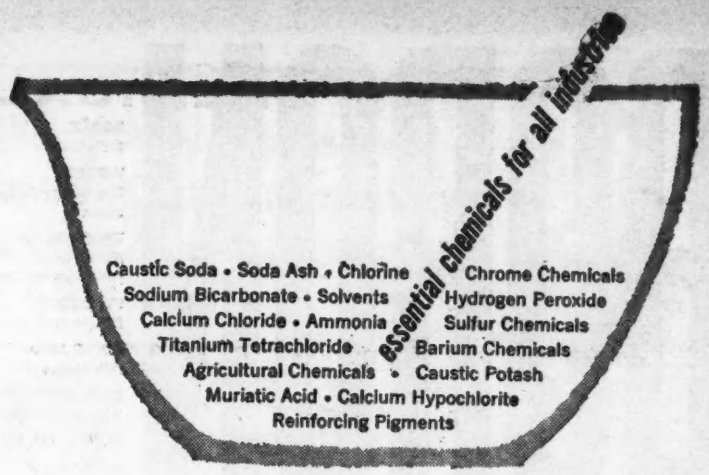
The bureau estimates that full coverage of the industry would show a total scrap consumption of 35,000 tons and secondary ingot output of 24,000 tons. Calculated aluminum recovery would total 27,000 tons and metallic recovery 29,000 tons.

Antimony — This item fared well in the first quarter, scoring increases in all categories, Mines Bureau reports.

Consumers used 3,200 tons of primary metal, up 12 percent from the fourth quarter of 1960. Imports of 3,700 tons

Paper Production Lower

The American Paper & Pulp Association reported paper production for the week ended June 3 at 87.5 percent of theoretical capacity, as compared with the revised figure of 91.9 percent for the previous week and 96.1 percent for the corresponding week of last year.



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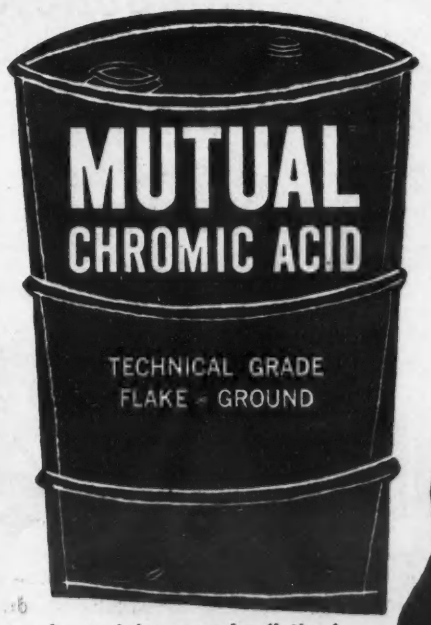

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Heavy Chemicals

were the highest since the last quarter of 1957. Primary US production was up 600 tons, and smelter output up 200 tons.

Industry stocks of antimony were down 6 percent by March 31, with most of the decrease in ores and concentrates, Mines notes.

Copper—Purchased copper-base scrap consumption in the US totaled 94,400 tons in March, up 24 percent from February, the Mines Bureau reports.

Operations of primary producers gained 26 percent, the largest gain, followed by brass mills with 24 percent, and secondary smelters with 22 percent.

Brass ingot production by secondary smelters rose 20 percent and output of refined copper increased 13 percent. Output of brass mill products gained 24 percent, and production of refined copper from secondary materials by primary producers was up 16 percent.

Stocks of copper-base scrap fell from 111,900 (revised) to 103,000 tons, Mines notes. Inventories dropped 13 percent at primary producers and 5 percent at brass mills but were virtually unchanged at secondary smelters, the agency reports.

Selenium — Domestic production of selenium and selenium compounds in the first quarter was 208,974 pounds of contained selenium, the Mines Bureau reports.

This represented a gain of 24 percent over the 167,931 pounds produced in the fourth quarter of 1960.

Shipments totaled 169,243 pounds of contained selenium, as against 167,724 in the fourth quarter of 1960, Mines notes. Imports were 31,746 pounds, excluding 2,418 pounds of selenium contained in imported concentrates.

Tin — Continuing very strong, market closed at an alltime high of $1.13 a pound, spot.

Heavy Chemical Briefs

GRACE EXTENDS DEEKS AREA: The territory covered by Deeks & Co., as distributor for "Syloid" silica gel products has been extended by W. R. Grace & Co.'s Davison Chemical Division to cover Florida, Mississippi and Alabama. The territory will be served initially out of Decatur, Ga., but later a Florida distribution point will be established.

MARKETING HEAD: Stuart V. Smith, vice-president and director of sales for Wyeth Laboratories, Philadelphia, appointed to the newly-created post of vice-president and director of marketing.

NALCO SUPPLYING AEC: Goodyear Atomic Corporation, prime contractor for Atomic Energy Commission, has placed an order with Nalco Chemical Company, Chicago, for $65,798 worth of sodium aluminate.

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Whither Plastics? Output for the Future

—Continued from page 7

tal some 130 million pounds, split up this way: farm film, 30 million pounds; construction film, 40 million pounds, and other uses, 60 million pounds.

Polyethylene sheet use in '65? Twenty million pounds.

Reading the cards for plastic building materials was Harry B. Warner, president of B. F. Goodrich Chemical Company, Cleveland, Ohio.

According to Mr. Warner's estimate, plastics will account for about 20 percent of the materials being used in home construction by the end of the decade.

Upturn in High-Density

The upturn in high-density polyethylene — seen by George Wash, director of plastics sales for Phillips Chemical Company, Bartlesville, Okla.—is indicated by sales for the first five months of this year.

Mr. Wash anticipates sales of 233 million pounds of high-density polyethylene and ethylene copolymer in 1961, which compares with the 170 million pounds sold last year.

For 1962, he predicts sales of around 347 million pounds, or 49 percent more than estimated volume for 1961.

Among others consulting the tea leaves for plastics was E. E. Winne, vice-president of the polymer chemicals division of W. R. Grace & Co., Clifton, N. J.

On the basis of new compounds and newly-developed plastic blow-molding techniques and equipment, Mr. Winne sees a possible 40-million-pound market in industrial containers by 1965 for high-density polyethylene.

Besides this, he reports "rapid growth and near-saturation use" of high-density PE for packaging light-duty detergents.

In fact, he says, this trend appears likely to "unlock the entire area for packaging retail household chemicals in blow-molded high-density polyethylene containers."

The Bleach Container Market

A strong possibility this year, he adds, is the switch of more than 75 percent of the half-gallon and one-gallon sizes of household bleach containers from glass to high-density PE. This alone, he notes, will mean a market of 40 million pounds a year in 1962.

As an indication of how far and how fast the industry has come, William T. Cruse, executive vice-president of the Society of Plastics Industry (sponsor of the exposition), reported that in 1956—when the show was last held in New York—plastics sales amounted to $2 billion (per capita use: twenty-two pounds).

This year, he expects sales to hover around the $4-billion mark and per capita consumption to be in the neighborhood of twenty-eight pounds.

Besides serving as a springboard for all sorts of looks into the future, the plastics show also served as a platform for these product developments:

New Plastic Products Unveiled

• Phillips announced a new high-density polyethylene resin tailored for extrusion coating. Designated "Marlex TR-515," the new product is aimed at a market which hit almost 60 million pounds last year.

• Foster Grant Company, Leominster, Mass., introduced a new polystyrene foam, "Fosta Foam."

• Spencer Chemical Company, Kansas City, Mo., disclosed development of a new thermoplastic resin. Trade-named "Poly-Eze," the new copolymer reportedly has properties related to low-density polyethylene, plasticizer vinyl and rubber.

• Nopco Chemical Company, North Arlington, N. J., unveiled a new, special-formulation polyester urethane foam for garment linings which, it claimed, affords closer knit appearance, better drape and softer hand than any previous foam on the market.

• Union Carbide Plastics Company, New York, announced availability of three new epoxy hardeners which are said to permit the production of castings having any degree of flexibility desired over a broad range.

• Carbide Plastics also introduced two new vulcanizable polyethylenes which are claimed to offer a combination of improved physical and thermal properties for insulation and jacketing.

• Rexall Chemical Company, a division of Rexal Drug & Chemical Company, Paramus, N. J., introduced a new series of "Elrex" polystyrene crystal and custom-tailored polystyrene impact materials.

• Dow Chemical Company, Midland, Mich., introduced a series of eight linear polyolefin resins for injection molding, blow molding and extrusion.

• Great Bay Chemicals & Plastics, Inc., East Brunswick, N. J., a subsidiary of Cary Chemicals, Inc., announced a new line of high-style, brilliant, metallic-tone calendered vinyl material. Called "Lustre-Tone," the material is offered in various colors and grains in supported and unsupported vinyl.

• Metal & Thermit Corporation, New York, offered a new, non-dusting flame retarder for incorporation in chlorine-containing plastic films and coatings.

Olefin Catalysts

—Continued from page 7

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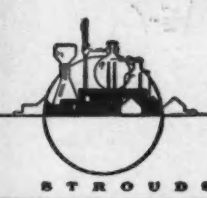

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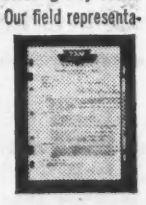

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COMPOUNDS AND CHEMISTRY

FDA's Gift to Labeling: A Zany Booklet

—Continued from page 5

ciation, and Association of the American Soap & Glycerine Producers.

The National Paint, Varnish & Lacquer Association decided that it was too late to do anything now—the pamphlets have already been distributed—but made no secret of the fact that it concurred wholeheartedly in the criticism that is being voiced.

Industry has until June 28 to file its comments on the general regulations that were made available for this purpose last April 28.

The associations all have some objections to various parts of the regulations as going much further than congress intended and will propose revisions.

The paint industry will ask that it be exempted because paint products present special circumstances which separate them from those of other industries covered by the law.

The sharpest criticism comes from CSMA. Robert L. Ackerly, counsel was that unless the pamphlet is withdrawn from further distribution, manufacturers will be thoroughly confused and will probably accept these requirements as final.

Unless no changes of substances are to be made in the regulations as proposed, he added, the pamphlet is worthless.

Just What Substances Are Included?

He noted in passing that the statement is made in the pamphlet that an estimated 600,000 children swallow household aids annually. He wondered whether this figure includes drugs, cosmetics, pesticides and other substances not regulated under the law.

Mr. Ackerly also questioned the meaning of the sentence in the same paragraph which reads, "Many adults are injured or killed by household products or through carelessness."

If the implication is that many adults are injured or killed through normal and careful use of household products, he said, he doubts the accuracy of the statement.

MCA's president Hull also warns that publication of the pamphlet can lead to considerable confusion since it contains material which may not be accurate after the FDA decides finally on the regulations.

He points out that the MCA has had seventeen years of experience with precautionary labeling and expressed the belief that the comments it will make on the proposed regulations will aid in the promulgation of reasonable and workable regulations.

He adds that one general principle which MCA members have always felt to be most important is that over-labeling is often as objectionable as under-labeling.

Over-labeling tends to promote a disregard by the public of all precautionary labeling, he said.

Letter Sent to HEW Chief

The Association of American Soap & Glycerine Producers made its feelings known in a letter sent by its manager, Roy W. Peet, to Abraham Ribicoff, Secretary of Health, Education & Welfare.

The letter said, in part:

"We were more than surprised to see this pamphlet at this time—especially in view of the fact that the department has only recently issued proposed rules and regulations for compliance with the basic law which was passed in 1960. We do not think it is proper to issue advice on compliance before final rules and regulations are published.

"We strongly protest the issuance of the subject pamphlet at this time and urgently request that its further dissemination and circulation be withheld pending the final approval and publication of rules and regulations under the basic law."

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Petroleum Derivatives

Although benzene exports declined sharply in April, total shipments for the year are double the pace set in the first four months of 1960. Approximately 3.3 million gallons of benzene left US ports in April as against 5.3 million in March. On the year, however, 1961 exports tally at 14.5 million gallons, compared with 7.6 million in the comparable four-month period of 1960. Major customers thus far this year: Italy—3.6 million gallons; Netherlands—3.4 million gallons; Mexico—2.5 million gallons; W. Germany—1.8 million gallons; Brazil—1.1 million gallons, and France—390,000 gallons.

Current price of export benzene is reported at 34 cents a gallon as compared with prices running close to 40 cents earlier in the year.

Correction: A recent column reporting a large-volume US-German benzene deal erroneously indicated the contracted price. Reliably informed sources now reveal the 27-million gallon purchase was made at current market levels instead of the lower price previously indicated in trade reports.

Domestic market conditions as reported by trade sources include increasing availability of benzene, a slightly depressed hexane market and rather limited demand for vm&p naphtha.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 10, 1960
104.11	104.11	104.11	103.82

For Current Prices See Page 10

Aromatic Solvents

Benzene — Trade sources report the market is adequately supplied.

Contract customers are fulfilling needs while spot buyers are able to secure reasonable amounts at 34c. a gallon.

Export sources report material is moving overseas at 34c. as well.

Latest export figures for April reveal that benzene sales were moving at close to 40c., however, accounted for by sources as the result of fulfillment of old contracts.

Domestic market price is not expected to hold at current level in view of new capacity coming on stream this year and next. How deep the price cut will be, and when it comes is still anybody's guess although most observers tend to believe no serious cut will be made until the first of next year.

Although benezene exports in April fell off from March shipments, total exports for the year are still running far ahead of the comparable four month period last year.

April exports totaled 3,278,778 gallons valued at $1,290,005, down nearly 2 million gallons from March.

Major shipments were made to:

Italy—1,266,983 gallons valued at $489,147 left from Galveston district.

Netherlands—853,031 gallons valued at $340,358 left from Galveston.

Canada — 583,664 gallons valued at $216,548 left from Buffalo and Detroit areas.

Mexico—549,352 gallons valued at $231,154 left from Laredo district.

Total exports for the year including April: 14,454,938 gallons, close to 7 million gallons ahead of the pace set last year.

No imports were noted for April.

Toluene—Export market has declined of late.

Price is now 18½c. a gallon with hard bargaining reported to be bringing 18¼c. a gallon upon occasion.

Former European customers for US toluene are reported fulfilling their needs captively in many cases. Only problem appears to be availability of feedstocks which in many cases is being solved by purchase of low cost, low grade Soviet crudes and then upgrading such material to usable levels.

Toluene exports to all countries in April totaled 1,046,023 gallons valued at $203,963. March's exports were nearly 2 million gallons higher.

Total toluene exports for the year through April were 11.9 million gallons, 3.4 million gallons below shipments in the same period last year.

Aliphatic Solvents

Hexane—Market conditions for solvent remain generally depressed.

Held accountable for the situation is the poor operating margins in the soybean market where oils extraction forms the major end use for hexane.

Hurting hexane sellers is the current low soybean conversion factor, i.e., the relationship between the cost of beans (now very high) and the eventual selling price of extracted oil.

Because of the high cost of beans and the fact that oils prices have not gone up in proportion, crushers are not operating at anywhere near capacity.

As a result, beans are moving into the export market or are being held off the market. Consequently hexane sales to domestic crushers are not considered satisfactory by solvent makers.

Other end uses are faring better. Rubber solvent and specialty uses are reported as stable with sales in accustomed volume.

VM&P Naphtha—Suppliers report demand continues rather limited.

Midwest market recently became more competitive with the entry of a new supplier.

Prices remain officially posted at 1c. a gallon above regular mineral spirits although shading is not uncommon in the more competitive areas.

LPG's

Down went production of lpg's in the first half of May. Output dropped to 371.6 million gallons after hitting 423.6 million gallons in the preceding two week slot. All categories shared in the decline with the exception of butane-propane mix which scored only a modest gain.

Inventory at plants, terminals and underground rose 77.5 million gallons during the period to register 1,057 million gallons as of May 15.

Butane—Output declined to 88.2 million gallons in the period May 1-15 after registering 104.1 million gallons in the preceding two week period.

Stocks rose to 320.6 million gallons on May 15 as against 297.2 million on April 30.

Waxes

Up in March went demand, production and exports of petroleum-derived wax. Stocks declined.

Domestic demand for wax was 385,000 bbls. (each bbl. equals 280 lbs.). This represents an increase of 25,000 bbls. from February, but is 40,000 bbls. below demand in March of 1960.

Demand for the year is slightly ahead of the pace set last year with consumption at 1,145,000 bbls. for the first quarter 1961 as against 1,128,000 bbls. in the same period last year.

Production rose to 545,000 bbls. in March after February output of 481,000 bbls. Total output for the first quarter was 1,501,000 bbls. as against 1,446,000 in the same period last year.

Exports rose to 124,000 bbls. in March compared with 108,000 bbls. in the month before. Total exports for the first quarter—331,000 bbls., up from the 314,000 bbls. shipped overseas last year in the first quarter.

Stocks at the end of March stood at 930,000 bbls., 36,000 bbls. above the February figure.

Crude Oil Stocks Drop

Domestic and foreign crude petroleum stocks at the close of the week ended May 27 were 1,080,000 bbls. lower than at the end of the preceding week.

Week ended May 27—257,263,000 bbls.

Preceding week—258,343,000 bbls.

This decrease comprises a decrease of 150,000 bbls. in stocks of domestic crude and an increase of 930,000 bbls. of foreign crude.

(Source: Bureau of Mines)

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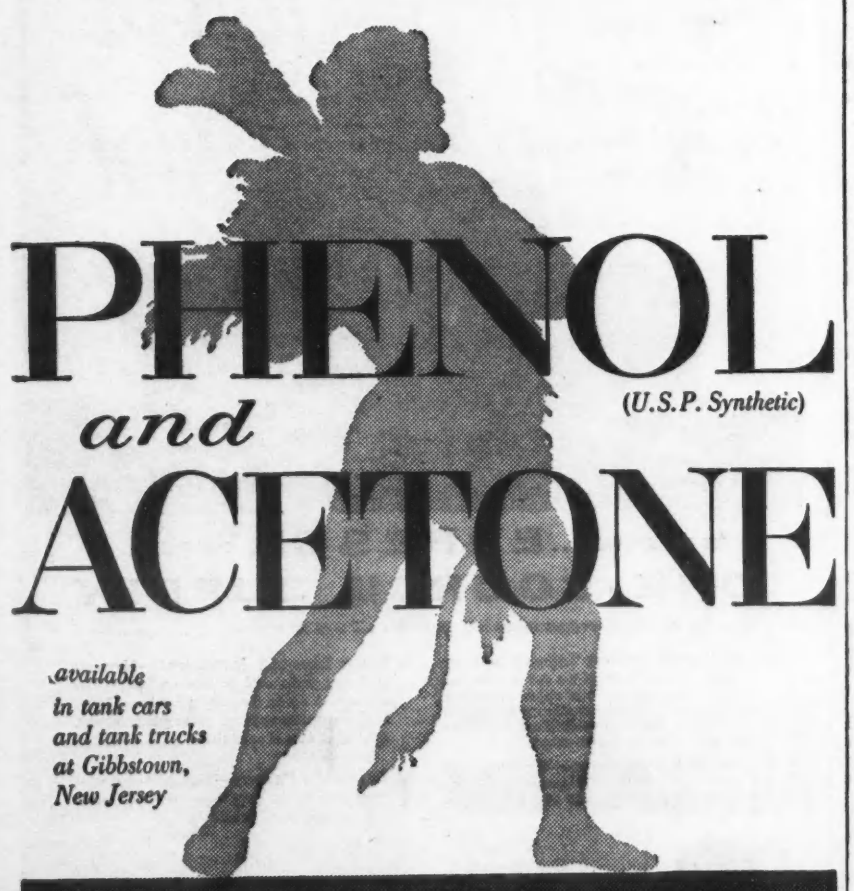

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Aliphatic Organics

Price changes in this market last week were confined to a 2 cent per pound drop across the board for ethylenediamine and a 3 cent increase on acetonitrile, the latter being effective immediately on spot and July 1 on contract. The market picture on practically all aliphatic organic chemicals is one of quite abundant supplies for prompt shipment, against a steadily increasing but not spectacular demand.

At this date it can be said quite certainly that business volume in the second quarter will be much better than that of the first quarter. Chemical manufacturers report that business started picking up in the last part of February and early March. It has not hesitated in its gradual and steady increase from month to month. Right now things look good for the balance of the second quarter. The feeling is expressed in most quarters that good business volume should carry over into the third quarter despite plant vacation shutdowns. This is a matter for conjecture.

The automotive business has picked up significantly in recent months, and quite a lot of aliphatic organic chemical business is directly or indirectly tied to the automotive economy. Appliances and other hard durables requiring either paints or plastics in their manufacture are likewise very important factors.

Acetone—Plastics consumers are using acetone in good quantity but still not at the levels which acetone producers would like to see. However, business has been getting steadily better over March, April, and May, and the feeling is expressed that it will probably continue at a good rate. Chemical intermediate demands are essentially unchanged.

Acetonitrile—Effective immediately on spot and July 1 on contract, the price of this item will be advanced 3c. per pound across the board. This move is made in an attempt to partially offset accumulated increased costs of manufacture, shipping, and the like. Under the new price schedule tankcars on a freight allowed basis will be 35c. per pound, drum carlots 37½c., and less than carlot drum quantities 39c.

Butanol—Demand for normal butyl alcohol was up considerably higher in the second quarter than it had been in the first. In the solvent and chemical intermediate fields, orders have shown a gradual uptrend over recent months. Price patterns in effect over recent months are holding firm, and expected to do so for at least the balance of the quarter.

1-Decanol—This 10 carbon chain normal falty alcohol maintains a firm price structure in which tankcars delivered in the East are listed at 37½c. per pound, drum carlots at 41½c., and less than carlot drum quantities at 43½c. to 44½c. per pound depending upon quantities. Demand in textile lubricants, plasticizers, paper softeners, antifoams, and cosmetic remains good but not spectacular.

Ethyl Alcohol — Solvent and chemical uses of ethanol, pure or denatured, maintain a sustained demand. Business has improved every month since February, and it appears that there will be no let-down in June. Supplies are quite adequate to meet all calls with prompt shipment.

Ethylenediamine—Prices were reduced 2c. per pound last week, which brings the new price schedule effective immediately to 38c. per pound in tankcars, 40c. in drum carlot quantities, and 41½c. in less than carlot drum quantities. These prices are on a delivered East basis. This action was taken by a major producer, who has a wide line of organic amines, but plans no change in any amine except ethylenediamine.

Price Trends

Advanced
None

Reduced
Ethylenediamine, 2c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 10, 1960
130.29	130.29	130.33	132.19

For Current Prices See Page 10

Furfuryl Alcohol—Like most aliphatic organic chemicals, there is a quite ample supply of this material available. However, there is a steadily growing acceptance of furfuryl modified resins for both cold set and hot set foundry core work.

Furfuryl based resins also find an outlet in carbon impregnating work where the resins are polymerized in place, for the purpose of sealing up the pores in carbon or other porous materials.

Methanol—While this alcohol has been made synthetically and marketed as such over many years, it still has growth potential and its production capacity is under expansion. Price patterns, however, over the years have been quite stable. In 1939 it was priced at 33c. per gallon. It's current is 30c. It has been as low as 24c. in 1945, held there through part of 1948, and then moved upward again under pressure of increasing costs.

Meanwhile, costs of manufacture, shipping, and labor have ranged wide and sharply upward. These were absorbed, and the industry looked constantly for technical ways and process improvements to offset increased costs. Methanol is a classic example of the determination of synthetic chemical manufacturers to hold the price line.

This is particularly interesting in the case of methanol, because not only have cost factors sharply increased over and over again, but methanol has won and lost many markets—big markets like antifreeze, jet fuel modifications, and the like. Yet, its price stays down, and overall physical volume goes up.

Methyl Ethyl Ketone—While business is not spectacular, there is little to complain about either. The resuscitation of the automotive industry with good spring and early summer sales volume has created a renewed demand for ketone solvents. Such industries as paint and plastics, which serve the automotive field with their products, are enjoying increased business volume. Direct solvent consumption in the manufacture of cars via finishing, etc. is correspondingly stepped up.

The economy of aliphatic solvents is largely an automotive economy either directly or indirectly, and most certainly it is tied to a hard goods economy—no demand for hard goods, very little demand for solvents. When hard goods are off, even the solvent—requiring soft goods industries are usually down. But the surest barometer as to whether solvent business is good or bad, is the state of automobile business.

Molasses—During the calander year of 1960, shipments of blackstrap from Puerto Rico to the United States mainland amounted to 30,289,267 gallons, as against some 24,237,920 gallons in 1959. It is interesting to note that in March of 1960, 4,100,000 gallons of molasses was used in making alcohol, while in March of 1961, only 1,600,000 gallons were so used. Ac-

Aliphatics Foreign Trade: April

Exports of selected industrial aliphatic organics for the months of March and April, 1961, as reported by the Bureau of Census, were as follows:

		March	*April*
Acetone	lbs.	703,867	740,425
Alcohols, including glycols, n.e.c.	lbs.	10,240,021	15,777,793
Butyl acetate	lbs.	4,976,933	3,591,260
Butyl alcohol	lbs.	7,075,730	15,568,893
Carbon bisulfide	lbs.	228,528	18,095
Carbon tetrachloride	lbs.	17,332	7,654
Ethyl alcohol	gals.	2,520	3,261
Ethylene glycol	lbs.	4,546,956	2,787,690
Formaldehyde, 40 percent solution	lbs.	943,266	374,495
Glycerine, crude and refined	lbs.	993,198	1,435,375
Methyl alcohol	gal.	1,513,819	1,370,166
Methyl ethyl ketone	lbs.	1,116,885	371,734
Propyl alcohol	lbs.	614,659	831,507

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Aliphatic Organics

cording to the Internal Revenue Service, during the first quarter of this year, molasses for alcohol production totalled 3,800,000 gallons as compared with 7,100,000 gallons during the first quarter of last year.

Markets for cane molasses to the feed industry were generally steady at prices virtually unchanged from those which have prevailed over recent days. Not much spot buying was involved, and shipments were for the most part based on previous contracts.

Tetrahydrofurfuryl Alcohol—This market is steady at its usual moderate volume. However, there were rumors of a new end-use developing which could well lead to very sizable business volume. Just what this new end-use is must, for the next couple months, remain a matter for conjecture.

Chemical Sales: '60-'61

—Continued from page 3

earn or to produce anything by the knowledge that it (or its equivalent) will be taken from him by taxes.

"People may produce in spite of, but never because of, taxes. This is not to belittle the importance of the manner in which taxes are levied . . . but it does permit the observation that big taxes as such are deadly deterrents.

"This is one case where I readily concede that bigness is bad," he said.

MCA's Lammot duPont safety awards went to Escambia Chemical Corpoartion (for companies with less than 2 million man-hours of annual work time) and the chemical and metallurgical division of the General Electric Company (for firms in the plus-2-million-man-hour category).

The awards are presented annually to the two companies which show the greatest percentage of reduction in their average disabling injury frequency rate for the past two-year period, compared to their rate for the immediately preceding three years.

Chemistry Teachers Honored

The association honored six outstanding US chemistry teachers. Medals, citations and checks for $1,000 went to:

Dr. Richard McLean Badger, physical chemistry professor at the California Institute of Technology, Pasadena.

Dr. John Richard Sampey, jr., professor of chemistry at Furman University, Greenville, S. C. Mrs. Sampey accepted the award on behalf of her husband who was ill and unable to attend the meeting.)

Dr. R. Nelson Smith, professor of chemistry at Pomona College, Claremont, Calif.

Dr. Louis Abell Pappenhagen, head of the chemistry department at Mount Union College, Alliance, Ohio.

Dr. Samuel Proctor Massie, jr., chairman of the chemistry department at Fisk University, Nashville, Tenn.

Dr. Ellis Llewellyn Krause, Erwin professor of chemistry emeritus at Marietta College, Marietta, Ohio.

NACA Staff Reorganized

—Continued from page 7

guson, president of Geigy Agricultural Chemicals, a division of Geigy Chemical Corporation, Yonkers, N.Y., chairman of the board.

H. F. Tomasek, president of Chemagro Corporation, Kansas City, Mo., vice-chairman of the board; L. S. Hitchner, president of the association; Jack Dreessen, secretary; Miss Lee H. Grobe, treasurer; J. A. Noone, technical director and Denis Hayley, director of information.

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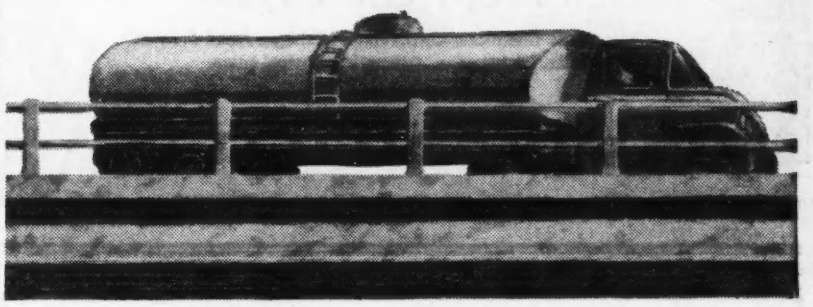

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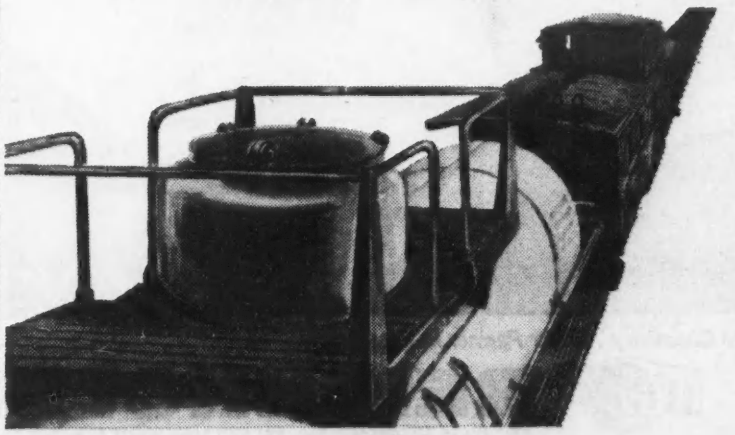

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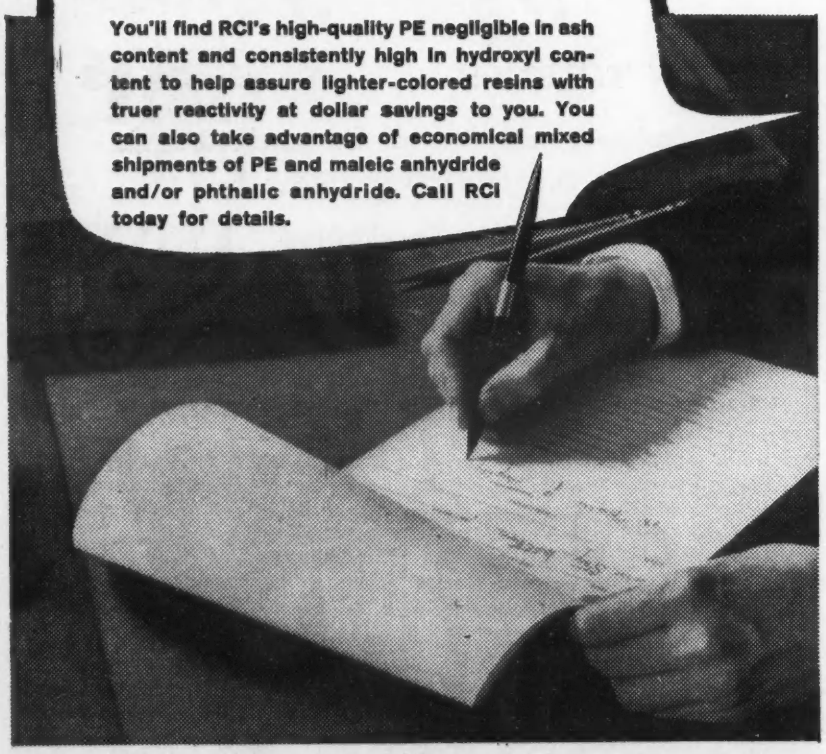

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REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N.Y.

Current Market Quotations

—Continued from page 31

Wintergreen oil, USP nat. northern, cns	lb.	6.35	17.50
USP, nat. southern cns	lb.	3.75	7.00
Wintergreen oil, syn. (see Methyl salicylate).			
Witch hazel bark, bls	lb.	.30	.35
Witch hazel leaves, bls	lb.	.75	.80
Wollastonite, fine paint grade, bgs., c.l., works	ton.	41.00	—
bgs., l.c.l., ex whse	ton.	51.00	—
medium paint grade, bgs., c.l., works	ton.	)	—
bgs., l.c.l., ex whse.	ton.	39.00	—
Wood alcohol (see Methanol).			
Wood oil (see Tung oil).			
Woolfat crude (see Degras).			
Woolfat USP (see Lanolin).			
Wormseed Levant bgs	lb.	2.50	—
Wormseed oil (see Chenopodium oil NF).			
Wormwood oil, cns	lb.	4.75	—

X

Xylene, coaltar, indust., tanks, works:			
Bethlehem, Pa.	gal.	.29	—
Birmingham dist.	gal.	.29	—
Chicago dist.	gal.	.28½	—
Cleveland dist.	gal.	.29	—
Geneva, Utah	gal.	.29	—
Johnstown, Pa.	gal.	.29	—
Lackawanna, N.Y.	gal.	.29½	—
Lone Star, Tex.	gal.	.27	—
Lorain, Ohio	gal.	.29	—
Middletown, Ohio	gal.	.30	—
Minnequa, Col.	gal.	.29	—
Philadelphia dist.	gal.	.29	—
Pittsburgh dist.	gal.	.29	—
Sparrows Point, Md.	gal.	.29	—
Terre Haute, Ind.	gal	.29	—
Youngstown, Ohio	gal.	.29	—
Petroleum, indust., tanks, f.o.b. works:			
Bayonne, N. J	gal.	.29	—
Baytown, Tex.	gal.	.27	—
Charleston, S. C.	gal.	.29	—
Chicago, Ill	gal.	.28½	—
Detroit, Mich., dlvd	gal.	.27½	.29
Houston, Tex.	gal.	.27	—
Philadelphia, Pa.	gal.	.29	—
Providence, R. I.	gal.	.30	—
Sewell's Point, Va.	gal.	.28	—
Wood River, Ill	gal.	.28½	—
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif	lb.	.21	—
dms., l.c.l., f.o.b., Richmond, Calif	lb.	.22	—
tanks, frt. alld.	lb.	.19	—
o-Xylene, dms., c.l., works	lb.	.08	—
dms., l.c.l., works	lb.	.09	—
tanks, works	lb.	.06	.06½
p-Xylene, dms., c.l., works	lb.	.20	—
dms., l.c.l., works	lb.	.21	—
tanks, frt. alld.	lb.	.1645	—
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald	lb.	.23	—
56°-58°C., m.p., dms., l.c.l., works, frt. equald	lb.	.33	—
60°-62°C., m.p., dms., l.c.l., same basis	lb.	.40	—
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal.	1.25	—
dms., l.c.l., same basis	gal.	1.30	—
tanks, same basis	gal.	1.05	—
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis.	gal.	1.35	—
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis	gal.	1.40	—
2,4-Xylidine, tech., dms. frt. alld.	lb.	1.15	—
2,5-Xylidine, tech., dms., frt. alld.	lb.	1.20	—
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb.	.39	—
dms., l.c.l. same basis	lb.	.40	—
tanks, same basis	lb.	.38	—

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns.	lb.	2.15	3.05
Yeast, brewers, debittered, USP XV, Saccharomyces dlvd.	lb.	.27	—
primary, USP XV, 150 mcg. B_1 per gram, 100-lb. dms	lb.	.47	—
USP XV, 270 mcg., B_1 per gram, 100-lb. dms	lb.	.52	—
Yeast, brewers, primary, USP, XV, 300 mcg., B_1 per gram, 100-lb. dms	lb.	.56	—
Yeast, brewers, USP XV, 900 mcg, B_1 per gram, 100-lb. dms.	lb.	.60	—
Torula, USP dlvd.	lb.	.18	—

YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls.	lb.	.40	.45
Ylang Ylang oil, Bourbon, bots.	lb.	7.00	22.00
extra, bots	lb.	24.00	33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works	lb.	.37	—
50-lb. bgs., smaller lots, f.o.b. works	lb.	.41	.44
Zinc acetate, NF, VIII, dms	lb.	.53	—
Tech., dms., l.t.l., works	lb.	.2950	—
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.25	—
bgs., less than 1,000 lbs., same basis	lb.	.27	—
Zinc chloride, NF, gran., dms	lb.	.42	—
NF, precip., powd., dms	lb.	.26	—
Tech., soln. 50%, dms., c.l., works 100 lbs.		5.80	—
dms., l.c.l., works 100 lbs.		6.40	—
tanks, works 100 lbs.		5.15	—
fused, dms., c.l., works 100 lbs.		10.70	—
dms., l.c.l., works 100lbs.		11.20	—
Zinc Chloride, tech. gran., fib. dms., c.l., works, 100 lbs.		11.45	—
fib dms. l.c.l. works 100 lbs.		11.95	—
Zinc chromate bbls., dlvd.	lb.	.29	—
Basic bbls. dlvd.	lb.	.34	—
Zinc cyanide dms., 1,000-lb. lots or more, works	lb.	.55	—
dms., smaller lots, works	lb.	.57	—
Zinc dust coml. bbls., c.l., works,	lb.	.16	—
Pigment, bbls., c.l., works	lb.	.15½	—
bbls., l.c.l., works	lb.	.17¼	—
Zinc fluoride, bbls., works	lb.	.49	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
dms. l.c.l., frt. alld.	lb.	.23½	—
Zinc metal, prime western, slabs, E. St. Louis	lb.	.11½	—
Prime western slabs, New York.	lb.	.12	—
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn., dms., frt. alld	lb.	.33	—
Zinc nitrate, tech., flake, 100-lb. fib. dms., l.c.l.	lb.	.16½	—
300-lb. fib. dms, l.c.l.	lb.	.14½	—
300-lb. fib. dms., c.l.	lb.	.14	—

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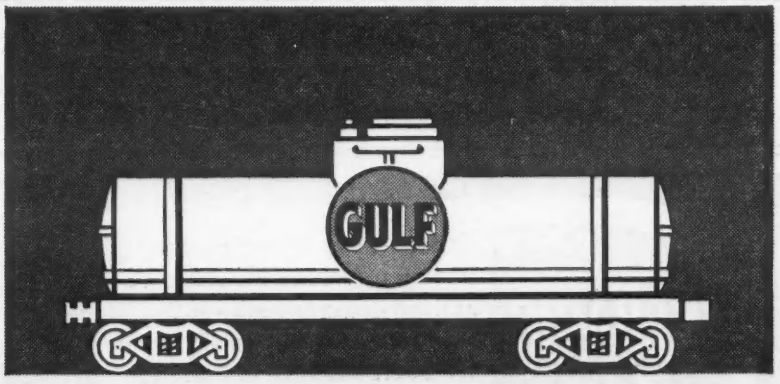

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Zinc oxide pigment, American process, lead-free bgs., c.l., f.o.b. works	lb.	.12½- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.13 - —
bgs., l.c.l., smaller lots, same basis	lb.	.13½- —
Zinc oxide, leaded, 35%, bgs., c.l., mills, f.o.b. works	lb.	.14 - —
bgs., l.c.l., 10 tons or more, same basis	lb.	.14½- —
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis.	lb.	.14½- —
Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b. works	lb.	.14½- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15 - —
Zinc oxide, French process, green seal, bgs., l.c.l., smaller lots, same basis	lb.	.14½- —
red seal, bgs. c.l. same basis.	lb.	.14 - —
Zinc oxide, French process, white seal, bgs., l.c.l., 10 tons or more, same basis	lb.	.15 - —
bgs., l.c.l. smaller lots. same basis	lb.	.15½- —

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Zinc oxide, white seal, bgs., c.l., same basis	lb.	.14¼- —
bgs., l.c.l., 10 tons or more, same basis	lb.	.15½- —
bgs., l.c.l., smaller lots, same basis	lb.	.15¾- —
Zinc oxide, USP, 50 lb.-dms., c.l., frt. alld.	lb.	.15¼- —
50 lb.-dms., l.c.l., 10 tons or more, same basis	lb.	.16¼- —
50 lb.-dms., l.c.l., smaller lots, same basis	lb.	.16¾- —
Zinc phenolsulfonate, NF, gran., dms	lb.	.45 - .46
NF, powd., dms.	lb.	.48 - .49
Zinc resinate, precip. 7.2-7.6% Zn., dms., frt. alld.	lb.	.48 - —
Zinc silicofluoride dms. works	lb.	12½ .14
Zinc stearate, USP, ctns., c.l.	lb.	.41 - —
	lb.	.41 - —
ctns., l.c.l.	lb.	.43 - .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd. E.	100 lbs.	8.00 - —
bgs., l.c.l., dlvd. E.	100 lbs.	9.00 - —
Zinc sulfate in bbls 40c. higher.		
Zinc sulfide pure, bgs. c.l., dlvd	lb.	.2530- —
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works	lb.	2.04 - —
Zinc, yellow (see Zinc chromate)		
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25 - —
bbls., c.l., works	100 lbs.	10.85 - —
bbls., l.c.l. works	100 lbs.	11.35 - —
Zircon (G) gran. bgs., c.l., works.	lb.	.03½- —
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅝- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04 —
bgs., smaller lots, works	lb.	.06½- —
Zircon (G) milled, bgs. c.l., works.	lb.	.04¼- —
bgs., 5 tons to c.l., works	lb.	.04⅜- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝- —
bgs., 500-1,999-lb. lots, works	lb.	.07½- —
Zircon (G) in barrels 1c. higher.		
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23 - —
Zirconium hydride, powd. electronic grade, dms., works	lb.	14.00 -15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50 - —
Electric-fused lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½- —
bgs., smaller lots, works	lb.	.51 - —
milled, bgs., c.l., works	lb.	.62 - —
bgs., 5-ton lots, works	lb.	.62½- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½- —
bgs., 500 to 1,999-lb. lots, works	lb.	.64 - —
bgs., smaller lots, works	lb.	.66 - —
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55 - .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.37 - .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62 - .65
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½- —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld	lb.	.26 - —
Normal, 250-lb. dms., frt. alld	lb.	.55 - —

Methanol and VAc

—*Continued from page 3*

that Borden would build a vinyl acetate monomer plant at the Geismar location, utilizing the acetylene generated by its jointly-owned subsidiary. Capacity of this plant will likely be in the neighborhood of 50 million pounds annually (OPD, 5/15/61).

Need for vinyl acetate monomer can be seen in that trade sources estimate Borden's overall polyvinyl acetate capacity to run in excess of 100 million pounds.

The Borden plants, it is understood, would be wholly-owned and not part of the Monochem subsidiary.

Meanwhile, there's no report from U. S. Rubber about what satellites it may intend to construct around the Monochem complex.

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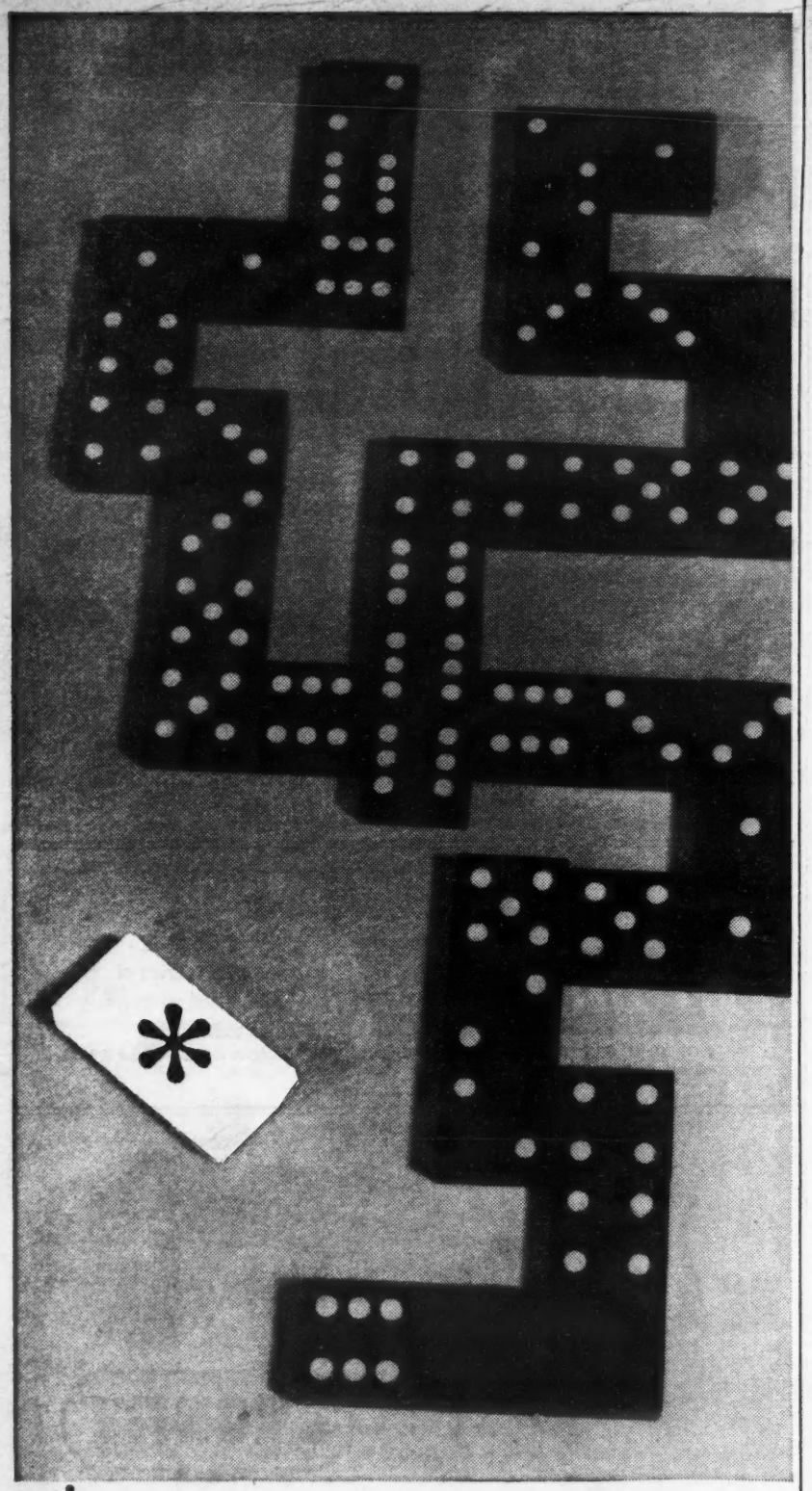

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KOPPERS COAL CHEMICALS

Coal Chemicals

A 50-million-pound-a-year phthalic anhydride plant is to be built at Institute, W. Va. by a major chemical producer. Scheduled to come on stream in the latter part of 1962, the new plant will employ the fluid bed process. Raw material will be naphthalene. Output is slated for captive production of plasticizers, production of which the company plans to boost 40 percent to an estimated 70 million pounds. No alkyds production is planned. A small portion of the new phthalic capacity will be merchanted to a nearby phthalic consumer, however.

Thus the producer closes the ring of plasticizer raw materials by adding captive phthalic capacity to its already-existing oxo alcohols capabilities.

Behind this bare outline lies a number of significant marketing factors. First off, is the decision of a consumer to build captive phthalic facilities in view of the current state of the market. Although phthalic supply is not up to needs right now and allocation is quite common, trade sources believe the market will soon suffer a surfeit. Then, too, sources feel a price cut is long since past due and predict that several sharp cuts will probably be made in phthalic listings before the new plant turns the tap.

Evidently having taken these factors into account, the new producer indicates that the plant is designed to operate economically at prices much lower than now posted.

Choice of raw material is logical in that the producer already has a naphthalene requirement for its specialty pesticide production. Thus by increasing the volume of naphthalene purchases, the producer aims to get a better price.

Two other factors also influenced the choice of naphthalene over o-xylene. One is that though naphthalene supply is now short, additional petroleum facilities due to come on stream this year and next will ensure a well-supplied market. Also naphthalene, and particularly petroleum-derived material, is of high quality and has a superior phthalic yield rate.

While one o-xylene producer reportedly will guarantee that the price of ortho will never exceed that of naphthalene, and a process-developing company claims high yields for ortho, the prospective phthalic maker has decided to go the traditional naphthalene route.

Situated as the plant will be, choice of naphthalene supplier could go three ways. To the west at Ashland, Ky., lies the only existing petroleum naphthalene unit in the world. Also to the west, in Toledo, Ohio, another petroleum unit is building. To the east, near Wilmington, Del., a joint petroleum naphthalene venture is planned.

Best bet now is that the Ashland, Ky. unit will supply the new plant. With a design capacity of 75 million pounds, and reportedly an actual operating rate of around 100 million pounds, the petroleum unit is well able to supply the new phthalic plant's requirements.

Price act.vity is beginning to quicken as the third quarter approaches.

Styrene monomer, technical grade, will go up 1/10 cent on July 1 for bulk shipments under terms of the escalation clause. New price: 11 cents a pound in tankcars.

p-Dichlorobenzene quotations will be raised 1 cent a pound across the board on contract July 1. Spot prices were affected by the change last week. New price will be 13 cents a pound for carlot amounts and 15½ cents for ton lots or less.

ADF cresylic acid price was hiked June 1 by one supplier as previously reported. Other major suppliers indicate the hike is now industry-wide.

Basic Products

Benzene—Although coke oven supply of benzene is not flowing into the market place in heavy volume, overall supply is considered adequate by trade sources.

Latest estimates place benzene supply from cokeoven at about 11 million gallons per month although latest accurate figures

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 10, 1960
117.90*	117.64	117.64	118.40

* Revised.

For Current Prices See Page 10

—for April—show benzene supply at the 9 million gallon per month mark.

Cresylic Acid—Major importers of ADF material report that the lead taken by one company June 1 in raising prices will be followed by the balance of suppliers.

New schedule is $1.00 a gallon for truckloads, $1.15 a gallon for carlot quantities of drums and $1.20 a gallon for less carlot amounts in drums.

Citing rising costs of raw material in the world market, sources also point out that the new differential of 5c. between carlot and less carlot amounts accurately reflects the cost of packaging incoming cresylic and matches the spread between similar volume shipments of domestic material.

Former spread was posted at 1½c.

Intermediates

p-Dichlorobenzene—A major producer is raising prices 1c. a pound across the board.

Effective immediately on spot and July 1 on contract, drums, carlots, f.o.b., works, freight allowed East is 13c. a pound. Drum price for ton lots or more, same basis, is 15½c. a pound.

m-Phenylenediamine — Forming the sixth greatest dollar volume of US export licenses granted for shipment to E. Germany in the first quarter this year, movement of this intermediate behind the Iron Curtain is attracting the curiosity of US chemical interests.

Some $104,400 worth of m-phenylenediamine was licensed for export during January-March according to the *Export Quarterly Report* of the Dept. of Commerce.

Suspicion in the trade is that E. Germany or the Soviet Union is employing the intermediate in the production of polyamide fibers with TDI a possibility as well.

Believed to be of particular interest to the Soviets is the development of higher melting point nylons.

Quantity of m-phenylenediamine being shipped is not of heavy volume, however, leading trade observers to believe that the Soviets are in the pilot plant stage of their developmental work.

Of the twenty-nine categories of export goods listed for shipment to E. Germany in the first quarter of 1961, dollar value of m-phenylenediamine exports ranked only behind soybean oil, cottonseed oil, tobacco, steel sheets and steel bars.

In the US domestic market movement into dyestuffs is reported slow at present. Prices are unchanged at $1.08 a pound for drums in carlt or truckload amounts and $1.10 for lesser quantities.

Resorcinol—One major supplier reports supply is rather long at present. Price is stable at 77½c. a pound for technical grade material in bags, carlot amounts. Lesser amounts are 1c. higher while resorcinol in drums carries a 1c. a pound premium.

Eastern European bloc nations are interested in resorcinol. This is brought out by the large dollar volume of export licenses granted in the first quarter of 1961 for shipment of resorcinol to the Soviet Union and Hungary.

Export licenses granted for shipments to the Soviet Union totaled $248,000 and were exceeded in value by only five categories: isobutyl alcohol; n-butyl alcohol; e-caprolatam monomer, and two categories of machinery. Export licenses to Hungary for resorcinol totaled $42,000.

Styrene Monomer—Under terms of the quarterly escalation clause, tankcar price of polymer grade styrene will be raised

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Here is the literature available on Olin Organic Chemicals

GENERAL

Organic Chemicals Catalog (MOC-131-61)
Organic Chemicals Price Folder (No. 4)
Organic Chemicals Uses by Industry (3-1-60)

TECHNICAL BULLETINS

Omamid Resins for the Surface Coatings Industry (OSD-100C-100)
Poly-G 3030 PG (Polyether Triol) (1-61.IU)
Poly-G 4030 PG (Polyether Triol) (2-61.IU)

TECHNICAL DATA SHEETS:

Chlorinated Solvents

Dichlorodiethyl Ether (MOC-100-119)
Ethylene Chlorohydrin Anhydrous (MOC-129-10)
Ethylene Dichloride (MOC-101-119)

Ethanolamines

Mono-,Di-, & Triethanolamine (MOC-106-119)

Glycols

Diethylene Glycol (MOC-103-99)
Dipropylene Glycol (MOC-128-80)
Ethylene Glycol (MOC-102-99)
Propylene Glycol (MOC-127-80)
Triethylene Glycol (MOC-104-107)

Glycol Ether Solvents

Poly-Solv EM, DM, EE, DE, EB, DB (MOC-105-50)
Poly-Solv D2M (MOC-119-109)
Poly-Solv EE Acetate (MOC-120-119)

Oxides

Ethylene Oxide (MOC-123-10)
Propylene Oxide (MOC-126-80)

Polyamide Resins

Omamid S and C (MOC-124-89)

Polyethylene Glycols

Poly-G 200, 300, 400 and 600 (MOC-107-99)
Poly-G 1000, 1500 and B 1530 (MOC-108-99)

Surfactants

Poly-Tergent J-200 (MOC-109-119)
Poly-Tergent J-300 (MOC-110-107)
Poly-Tergent J-400 (MOC-111-59)
Poly-Tergent J-500 (MOC-112-119)
Poly-Tergent B-200 (MOC-113-119)
Poly-Tergent B-300 (MOC-114-89)
Poly-Tergent B-350 (MOC-130-30)
Poly-Tergent G-200 (MOC-115-119)
Poly-Tergent G-300 (MOC-116-89)
Poly-Tergent LF-400 (MOC-125-109)

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Coal Chemicals

1/10c. a pound to the level of 11c. a pound effective July 1.

Carlot and less carlot amounts are unaffected by the quarterly change under the new escalation clause enacted at the beginning of the second quarter.

Market conditions have improved notably for styrene in recent weeks.

Rubber business has moved upward on the strength of high auto production. Polyesters are reported moving well as the boating season brings on a rash of sales.

Polystyrene moulding compounds business is expected to continue at a good pace at least through June into early July, easily a month after sales curve normally levels off.

Styrene exports in April were 6,899,865 pounds, double March's volume. Value of April exports was $734,160.

Major shipments were made to:

Netherlands—5,408,070 pounds valued at $548,188 left from Galveston area including small volume shipments from Philadelphia and New Orleans.

Mexico—891,870 pounds valued at $104,043 left from Laredo district.

Brazil—220,580 pounds valued at $30,419 left from Galveston.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended June 3, were as follows:

Ammonia liquor	lbs.	613,724
Ammonium Sulfate	lbs.	2,612,380
Benzene	gals.	2,813,867
Coaltar	gals.	1,419,571
Crude chemical oil	gals.	555,825
Solvent naphtha	gals.	92,632
Toluene	gals.	625,303
Xylene	gals.	173,696

Urea Seen No Threat

—Continued from page 7

urea without harm to the animal. Very careful balancing of rations must be followed to avoid ill effects to livestock, it is pointed out.

USDA researchers have studied trends in marketing and use of urea in feeds to learn the probable effects on the markets for such feed ingredients as soybean meal, cottonseed meal, and linseed meal. They found use of urea is spreading, yet the general opinion—with some exceptions—is that substitution of the chemical for more than one-third of the meal in the ration is unwise.

The study is part of a national program of research to improve efficiency in marketing farm products. A copy of a preliminary report on the study, "Impact of Urea on Oilseed Meal Markets," Marketing Research Report No. 472, may be obtained from the Office of Information, Department of Agriculture, Washington 25, D.C.

SOCMA to Honor Chemist

Synthetic Organic Chemical Manufacturers Association has booked Dr. Melvin S. Newman, professor of chemistry at Ohio State University, as featured speaker at its next monthly luncheon meeting, slated for Thursday (June 15), at the Roosevelt hotel in New York. As recipient of SOCMA's second annual medal for creative research in organic chemistry, Dr. Newman will give an acceptance speech entitled "Problems in Modern Chemical Education."

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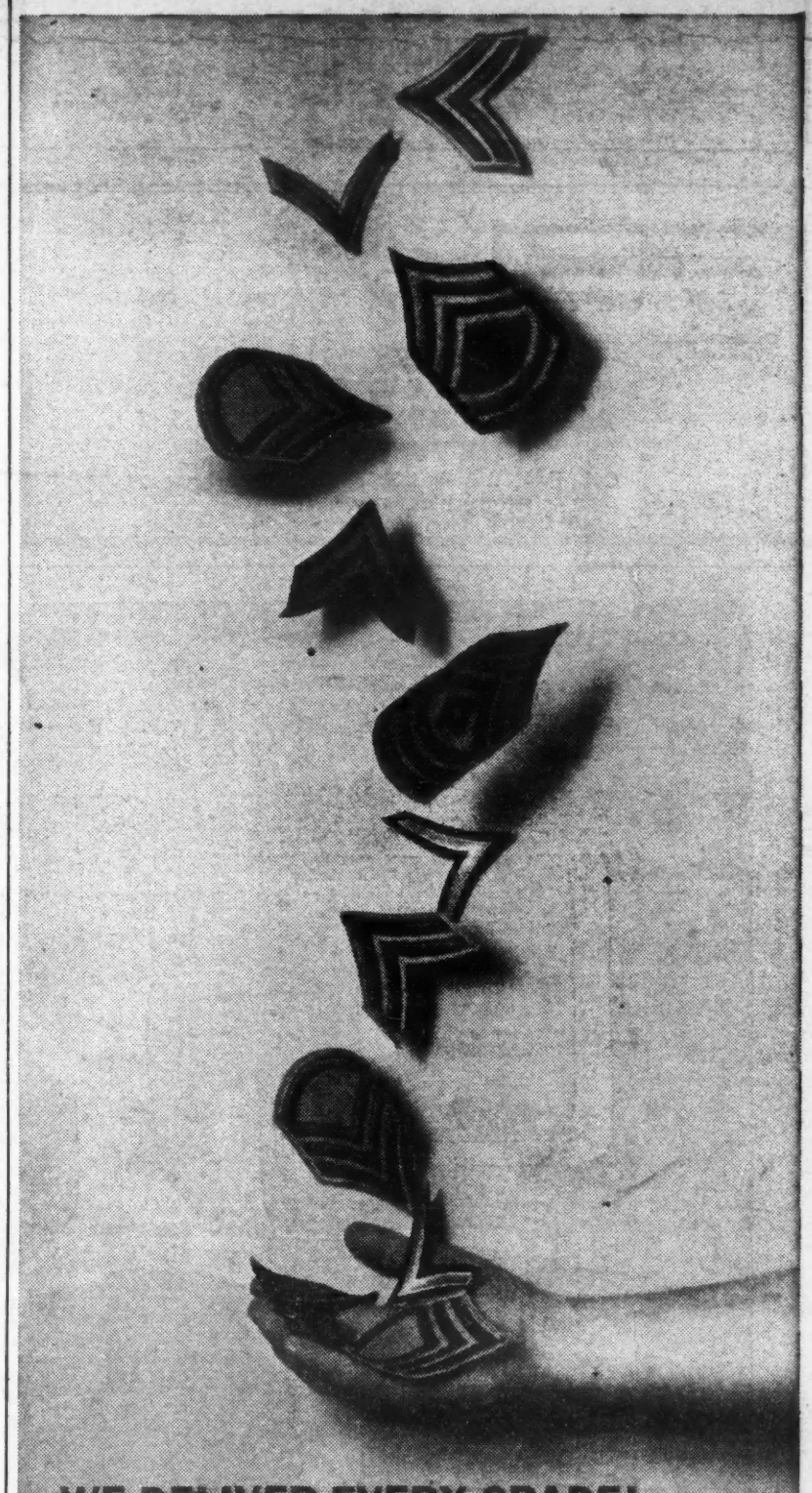

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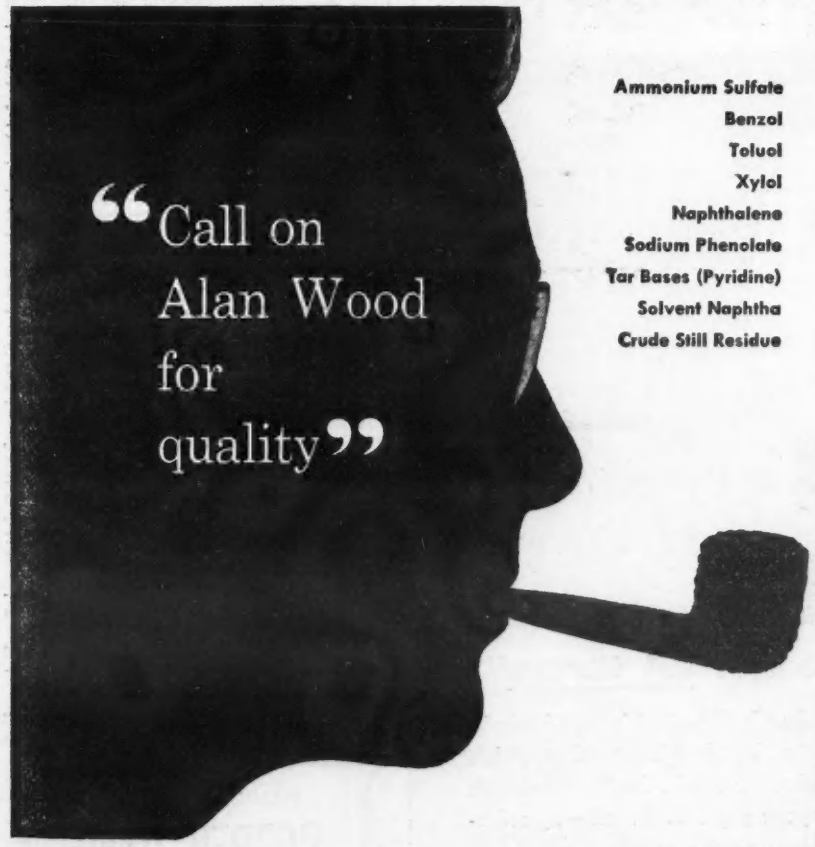

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Celanese Is Setting Up A New International Unit

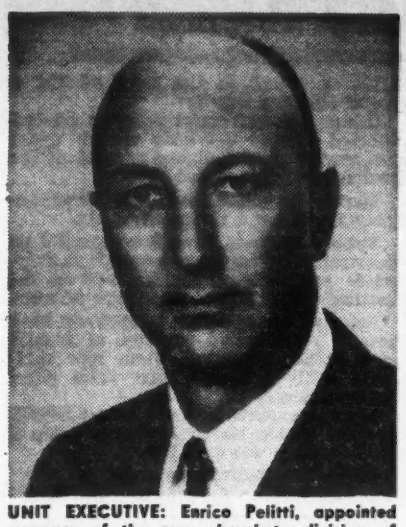
Administration of Celanese Corporation of America's expanding range of foreign activities is being centralized in a new subsidiary—Celanese International Corporation.

Richard W. KixMiller, executive vice-president of international operations, will head up the new affiliate.

Named to serve under KixMiller are Fletcher Horn, vice-president and assistant to the president; Harrison C. Givens, jr., and Robert L. Mitchell, vice-presidents and Dr. Howard L. Pilat, assistant vice-president.

DuPont in Polypropylene

E. I. duPont de Nemours & Co.'s program of expansion in the field of polyolefin polymers has been broadened to include market development work on polypropylene resins. DuPont's polyolefin district sales offices in Boston; New York; Philadelphia; Detroit, Mich.; Chicago, and Los Angeles will have limited amounts of resin available for sale as part of a market evaluation program beginning late July.



UNIT EXECUTIVE: Enrico Pelitti, appointed manager of the new phosphate division of Chemical & Industrial Corporation, Cincinnati, Ohio, and its subsidiary, Girdler Corporation, Louisville, Ky.

Procaine HCl Makers

—Continued from page 3

connection with the investigation for August 15 at the commission's headquarters in Washington. Interested persons desiring to appear and be heard are asked to notify the commission at least five days in advance of the hearing date.

Procaine is dutiable under paragraph 28(a) of the tariff act of 1930 at a rate of 45 percent ad valorem plus 7 cents a pound. Under the General Agreement on Tariffs and Trade, however, concessions have been granted cutting the duty to 25 percent ad valorem plus 3½ cents a pound.

The product is one of the 100 additional chemicals studied by the Office of Defense Mobilization several years ago under the survival items program.

According to B. L. Lemke & Co., imports have increased from only five pounds in 1958 to 13,033 in 1959, and when figures for 1960 are available, it was stated, they will show a further substantial increase that is still continuing.

Domestic Prices Undercut

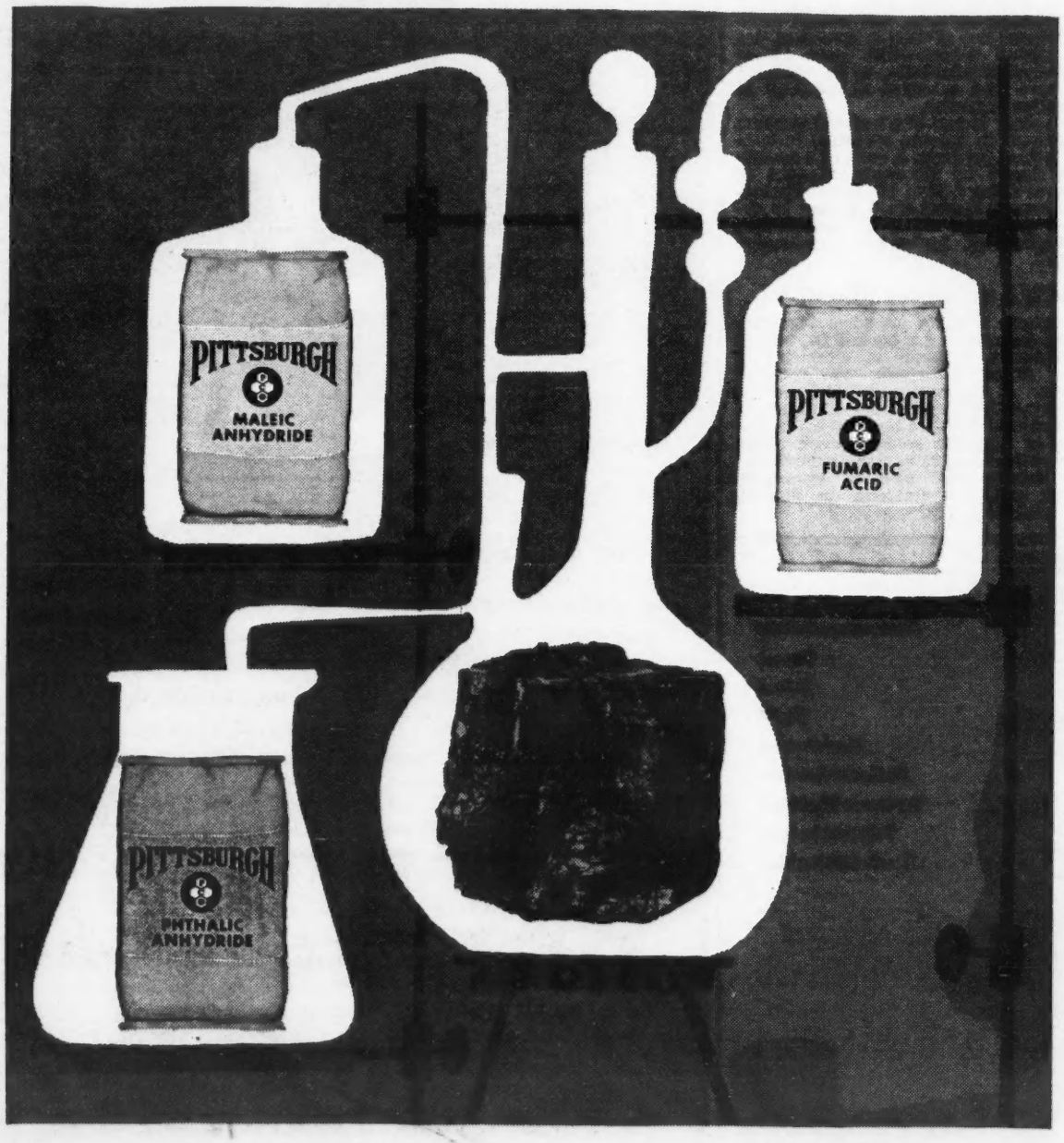
Prices of domestic procaine hydrochloride have been reduced, it was added, from the high of $3.12 in 1952 to $2.10 this year, while imported material is being offered at $2 a pound or less.

Lemke says that it can not sell the material at $2.10 a pound without suffering a loss. To make a reasonable profit, the price would have to be $2.85 a pound, which could be accomplished by restoring the duty to its former level, it was stated. The petition added:

"In 1952 there were six producers of procaine hydrochloride in the US. At present there are only two, namely Abbott Laboratories and ourselves. Unless the import duty is raised, we may be forced to discontinue the manufacture of procaine hydrochloride. This might jeopardize our entire business since procaine hydrochloride represents 20 to 25 percent of our total sales and because all the other thirty-five to forty medicinal chemicals we manufacture have been similarly affected by foreign competition."

The Abbott petition reports 1960 imports at 16,000 pounds and predicts that they will be much greater this year because "our customers report that large quantities of these products are being currently offered to them by importers at prices well below the prevailing domestic level."

The petition added that domestic production of procaine and its derivatives is seriously endangered by imports and any further reduction in price will make it financially unfeasible for Abbott to continue domestic production.



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DDT Demand, Despite Low Price, Still Waiting on Bugs and Weather

Bugs and weather, the two controlling factors in the DDT market have delayed the start of insectide applications throughout the nation. While some movement of DDT is reported in the Rio Grande area of the Cotton South, producers find that sales are several weeks behind schedule. The 2-cent-a-pound reduction posted on DDT is expected to beef up demand in some respects. But the farmer's notorious habit of waiting for infestations to appear in his fields before buying insecticides reduces demand to a matter of bugs and weather.

DDT at 21 cents is a bargain for farmers and, despite the soaring costs of raw materials, it marks a new low in DDT listings. Concern over the weakening in DDT prices is based on the high cost of raw materials. In 1959, when DDT sold for 22 cents, chlorine cost 3.15 cents a pound, benzene 31 cents a gallon and ethanol 52 cents a gallon.

Since then, benzene has increased 3 cents and chlorine 0.01 cents. The one bright spot in the raw materials market is the possibility that benzene prices will come down. But most informed sources feel that the domestic market for benzene will probably hold at least until the end of the year.

While the domestic market is somewhat uncertain, exports of DDT are at very high levels. Last year, when DDT production hit an all-time high of 164 million pounds, exports accounted for 60 percent of domestic production.

The 99-million-pound DDT export market brought in $30 million to US producers, according to Business & Defense Services Administration.

Exports of DDT are expected to continue at a high level for several years, BDSA reports. The various malaria eradication programs should provide a solid export market.

Trade sources report that overseas shipments of DDT to date have equalled the levels for last year, and in the next six months might exceed the 99 million pounds shipped in 1960.

In looking over the domestic market situation, trade sources concede that the picture could be reversed overnight. A long spell of hot, wet weather could incubate latent infestations and send demand soaring.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	June 10, 1960
117.69	117.70	111.70	109.97

For Current Prices See Page 10

Animal and Plant Foods

Index of prices paid by farmers for fertilizer last fall was about 107 percent of the 1947-49 average, changing little this spring. USDA reports in its May issue of the "Farm Cost Situation."

Official estimates of expenditures for fertilizer and tons of plant nutrients consumed show the cost of nutrients was only $1 per ton more, or one percent higher in 1959, than in 1947-49.

This change reflects more adequately the effect of the increased nutrient content of fertilizer, which has been a factor in holding fertilizer costs to farmers relatively low compared to changes in cost of other imports, USDA reports.

In comparison, farm production expenses have risen 46 percent, while prices paid for production goods and services have climbed only 20 percent.

Ammonium Nitrate—In the first fertilizer schedule for the coming crop year, one producer announces that prices will remain the same as in 1960-61 with a seasonal discount price from August through September, 1961, quoted at $64 per ton, f.o.b. works.

The October through December price will be $67 per ton and from January, 1962 forward, $70 per ton. The producer's practice of quoting a delivered price has been continued with a $3.50 a ton increase over the f.o.b. price in 30 ton car lots.

In addition, the producer will quote one delivered price for its principal market area. The effect of this change will be to reduce delivered prices $1 to $2 per ton in areas that were formerly zoned.

Manganese Sulfate—One producer has announced an increase of $3 per unit of manganese in manganese sulfate effective July 1. In the new schedule, the base price for a thirty-ton car delivered east of the Mississippi will be $85 per ton. In making the announcement the producer states that the increase results from the higher costs for manganese ore.

Urea—The trade is studying the latest move in the pricing and marketing of urea. As reported last week, one producer announced that he will adopt a zoning system similar to that used in marketing ammonium nitrate.

According to the producer, fertilizer grade urea will be sold on an f.o.b. basis in the southeastern and northeastern states, while in the midwestern states a delivered price will be in effect.

The shift toward delivered prices is welcomed by other producers, sources say. Since an f.o.b. price has the tendency of entering a uncontrolled variable into the market. Cheap transportation under f.o.b. pricing becomes the deciding factor in a sale.

Since only two producers have announced schedules for urea in the coming fertilizer year, the bulk of the trade is still uncommitted. A quick survey of the producers indicates that no decision on prices will be forthcoming for the next few weeks.

While prices are the big topic in the urea market these last few weeks, shipments of urea, particularly in the midwest is reported to be at record levels. One source reports that when the final figures are in, urea sales in the midwest will probably hit the highest rate to date. These source feel that on the basis of the recent low prices in the urea market, and renewed interest in urea as fertilizer have accounted for the increase in sales.

The British magazine, *Nitrogen*, reports in its roundup of urea market trends that the acceptance of urea as a fertilizer is steady, but still lags behind industrial use. Urea consumption at 546,000 tons has increased 310,000 tons in the last five years.

Of this total, the rapidly expanding usage in Mexico accounts for about 50,000 tons, virtually all as fertilizer. Canadian usage is reported to be negligible. The growth of fertilizer urea consumption has been stimulated by the widespread development of its use in solutions and complex formulations which account for approximately one-half of the total.

Looking toward new markets, *Nitrogen* sees the potentialities of the Central and South American fertilizer markets as providing the added stimulus to the rapid expansion of US urea capacity and supplies.

Pesticides

Quotations for the erection of a plant capable of annually producing 1,000 tons of benzene hexachloride, 2,000 tons of DDT and 250 tons of pure chloral hydrate are requested by the Director of Plant Protection, Ministry of Food and Agriculture, Karachi, Pakistan.

Quotations are required on c&f Karachi/Chittagong basis showing f.o.b. and freight element separately, installation fees and cost of a consultant who would stay on to run the plant for one year and train Pakistani counterpart.

Quotations should include details and cost of essential requirements for laboratory equipment to maintain quality checks on production.

Information on the closing date and sources of financing are available through the Embassy of Pakistan, 2315 Massachusetts Avenue N.W., Washington, D.C.

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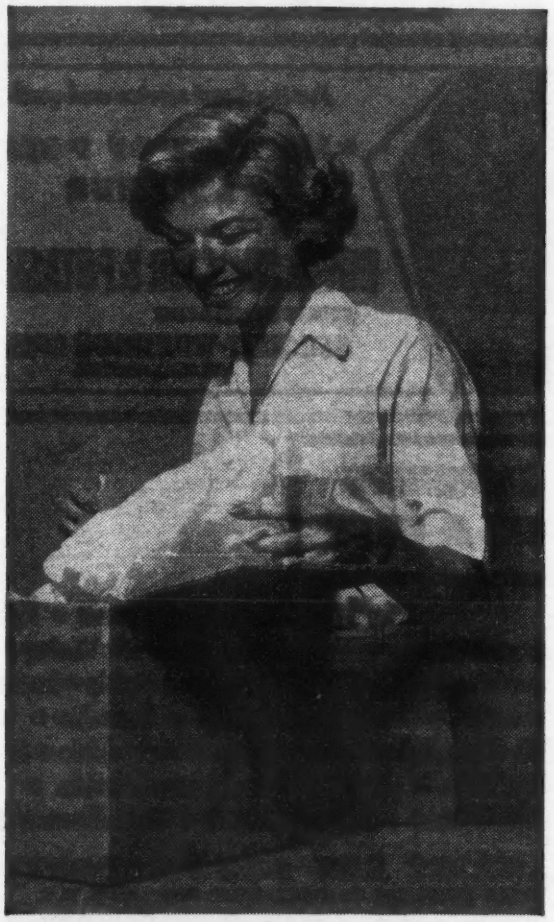

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Drugs, Fine Chemicals

News in the drug market this past week was not breath-taking. But to those who know and live with the industry, its news this week contained an item that made one feel some respiratory inhibition ranging anywhere between a sob and a curse. The news referred to, of course, is that just one more drug product long manufactured domestically may fall utterly to foreign low cost suppliers unless the government allows some means of relief from loss operations via proper protective tariffs.

There had been six producers of procaine hydrochloride in the United States. Cheap foreign competition cut prices down to a point where only two survived, and these two now say they will go out of business on the item because they lose money on every pound sold to meet foreign competition. This is just one more of a long line of drug products which have gone this same route for the same reasons, provoking the sad to angry respiratory effects mentioned above.

Government policy over recent years has been one in which foreign low cost producers are aided by the refusal of the United States government to give domestic American producers adequate tariff protection on items on which they were losing money. Low priced foreign drugs are permitted to come into the country and be sold at prices frequently below the manufacturing cost of domestic producers.

Yet because the American manufacturer by good management and technology diversified into enough varied products so that the company as a whole it not losing money, the government more often than not denies relief. Thus is American industry penalized for its ingenuity and its ability to make money even though its labor pay scales are several times that of foreign competitors.

Ammonium Molybdate—CP crystals are being advanced immediately on spot and July 1 on contract. The reagent grade is advanced 15c. per pound across the board, and the commercial CP crystals are advanced 13c. per pound across the board. Under the new schedule, the price of a single 400 pound polyethylene lined drum will be $2.05 per pound for the reagent crystals and $1.37 per pound for the CP crystals.

CP crystals in larger quantities are correspondingly reduced, depending upon quantity, to where shipments in 400 pound drums which are in 15,000 pounds and over, are priced at $1.35 per pound under the new higher price pattern.

Other molybdenum compounds are correspondingly advanced, the details of which are discussed in the market section dealing with "Heavy Chemicals."

Aspirin—Market supplies are more than adequate to meet demand, not only because of quite abundant production capacity to take care of the country's needs, but primarily because this is the off season approaching, during which aspirin demand falls to its lowest point of the year. Primarily, the drop stems from the fact that people get, or are threatened with, fewer colds during the warm summer months. Hence they take less aspirin to reduce pain and fever, and take less APC and cold tablets.

Caffeine—Orders for the months ahead are shaping up well. While at this season caffeine loses the cold remedy trade which drops off seasonally at a sharp angle, it picks up the beverage trade. Soft drinks of the cola type are in heavy seasonal summertime demand, and lend a real spurt to the caffeine market.

Erythorbic Acid—Prices currently in effect on a single 100-lb drum amount to $2.90 per pound. In quantities of 200 or more, packaged in 100 pound drums, the price is $2.80 per pound. Smaller than 100 pound drum single shipments vary in price, depending upon quantity, up to $3.31 per pound for a single 5 pound fiber drum.

On sodium Erythorbate, prices start at $2.37 per pound for shipments of 200 pounds or more in 100-lb. fiber drums. Smaller shipments vary as to quantity up to $2.78 per pound for a single five pound fiber drum.

Gelatin—Total gelatin output in April, according to the Bureau of Census, amounted to 5,191,000 pounds as compared with 5,361,000 pounds turned out in March, and some 5,188,000 pounds produced in April of last year. Of this total, April output, some 790,000 pounds were derived from ossein and 4,401,000 pounds from hides. Photographic gelatin production ran at a rate approximately one-fourth that of edible gelatin production. Stocks of gelatin at the end of the month totaled 15,299,000 pounds in April, as against 14,592,000 pounds in March, and 10,814,000 pounds one year ago.

Procaine Hydrochloride—History keeps repeating itself in the drug industry to the detriment of all concerned, yet the government never seems to learn, and keeps on bargaining away American business for the benefit of foreign interests. Latest in a long chain of drug casualties is the now threatened domestic procaine hydrochloride industry.

There used to be six domestic producers, all doing business at a profit. Now there are only two domestic producers left, and they are losing money on virtually every pound produced. They threaten to go out of business and let the entire US supply be furnished by low priced foreign competition.

Because these two American producers make products other than procaine hydrochloride, on which they are able, as a company, to make an overall profit, relief on procaine hydrochloride via adequate protective tariff seems to be virtually impossible to come by—the same old story all over again.

Price Trends

Advanced
None

Reduced
Procaine hydrochloride, 15c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 10, 1960
59.27	59.27	59.29	60.25

For Current Prices See Page 10

Botanicals

Buyers of botanical drugs would do well to keep a sharp eye out for new crop botanicals, and negotiate for their supplies at as early a date as they can conveniently get covered. The reasons are simple and imperative. Supplies are scarce because of sustained adverse weather conditions affecting actual availability, and the scarcity of gather-

Drugs and Fine Chemicals Exports: April

Exports of selected drugs and fine chemicals for the months of February and March, 1961, as reported by the Bureau of Census, were as follows:

		March.	April
Analgesics and antipyretics	lbs.	144,814	55,505
Antibiotics, bulk & dosage, forms, n.e.c.	gms.	14,832,067	24,583,114
Ascorbic acid	lbs.	88,106	223,141
Aspirin	lbs.	278,873	159,066
B-Complex (excluding B_1 and B_{12})	lbs.	38,672	47,261
Bacitracin	100-million-units	2,781	4,433
Dihydrostreptomycin, bulk	gms.	7,478,713	5,574,772
Pectin and preparations	lbs.	56,392	64,170
Penicillin, bulk	billion units	10,125,762	6,060,601
Streptomycin, all forms	gms.	8,225,953	19,369,126
Sulfa Drugs	lbs.	59,784	51,690
Thiamine	lbs.	14,959	4,391
Vitamin A bulk, medicinal	lbs.	13,845	4,965
Vitamins, bulk, n.e.c.*	lbs.	72,677	53,220

* Not elsewhere classified by the Census bureau.

ers creating high labor costs resulting high prices for the new crop drugs.

While it is difficult to pinpoint just what the price pattern is likely to be in the months ahead, one sure thing is apparent, prices will be significantly higher on domestic botanicals this year than they were last year. From what can be judged at this date, it seems that the new crop botanicals in most instances are being offered at price levels at or only very slightly under the prices of old crop inventories. In some cases new crop material is higher, in other cases lower. Until recent times, new crop botanicals were generally lower.

Cascara Sagrada—New crop bark quotations on the West Coast are said to range on the order of 25 cents per pound for shipment in July and August. East coast prices on new crop material will be in the range of 30 to 32 cents per pound, the feeling was expressed. Sizable orders would be subject to some further negotiation.

Gum Karaya—Imports of gum karaya declined 7 percent in 1960, following a 13 percent increase the previous year. The '60 total was 8.1 million pounds. India furnished 88 percent, and France, Sudan, Pakistan and the United Kingdom accounted for the remainder.

Gum Tragacanth—Tragacanth imports in 1960 totaled 1,749,000 pounds, and were 54 percent higher than those of '59. About 90 percent of this material came from Iran.

The average import price last year was 82.1c. a pound, only slightly higher than the previous year's (82.6c. a pound).

Higher prices and restricted crop areas makes it difficult for tragacanth to compete with other gums in many areas, Business & Defense Services Administration notes.

Plastics Increase

—Continued from page 5

this area will be less dramatic, according to Monsanto's spokesman.

Biggest contributors to growth in the rigid packaging area were said to be blown bottles and molded or formed containers and lids for food packaging.

Dairy applications, accounting for 25 million pounds of molded and formed packaging in 1960, are expected to jump to 96 million pounds by 1965. Lids for these containers should move from 9 million to 37 million pounds.

Produce baskets and trays, Mr. Mahaney predicted, should double from 8 to 17 million pounds by '65.

Together with an increase from 16 to 32 million pounds in the miscellaneous column, this should give a total food packaging market of 182 million pounds in 1965, a 300 percent rise from 58 million in 1960.

The grand total for all rigidly packaged consumer goods in 1965 is pegged at 513 million pounds, up from 193 million in '60.

In extrusion coating, the largest growth area is seen in board coating, with an anticipated growth from just 2 million pounds in '60 to 96 million pounds by '65.

Surfactants: Pep Pills?

—Continued from page 7

changes in sticking, spreading or wetting abilities."

Slight changes in the chemical structure of a surfactant, however, greatly influence the properties imparted to solutions. In examples cited by USDA, changes occur in the solution's ability to conduct electricity and in the relative degree of colloid aggregation (clumping of dispersed, but undissolved substances).

USDA's research effort is said to have many implications:

If a smaller amount of herbicide with a surfactant controls weeds as efficiently as a greater amount without the agent, it may permit lower-cost weed control—and herbicide residue hazards might be greatly reduced.

Then, too, surfactants, might add to a weed-killer's effectiveness in combating weeds unusually difficult to control without increasing toxic residues on desirable plants.

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Fats and Oils Scarcity Overseas Cheers US

—Continued from page 7

pected increase in world output of fats and oils would prove largely illusory.

This increase, he noted, would consist largely in sunflower seed oil that would be unlikely to find its way out of Russia and Argentina, where local demand continues strong. The increase in palm oil production is forecast at 4,800 tanks. Half of this will be absorbed by population growth, and the remainder should have little impact on the market.

For a more detailed outlook on the 1961-62 season, fats and oils men will have to wait until Spain discloses her buying schedule, it was noted.

Spain's Schedule Is Important

"If she takes large quantities of oil this summer," Mr. Keirstead said, "our oil stocks will be reduced considerably. If not, the USDA export forecast of 1.5 billion pounds for soybean oil and cottonseed oil combined will not be realized."

In other talks at the NAPA meeting, Hugh E. Klein informed a chemical buyer's group panel that they are "putting away the shotguns and loading the rifles" at Union Carbide Corporation.

Mr. Klein, a district manager for Union Carbide Chemicals Company, contributed to a panel discussion of "New Frontiers in Chemicals." He explained that Carbide had switched its product development emphasis to finding the chemical to suit an existing market need (the "rifle" approach.

The chemical industry's classical approach, he noted, has been to find a market for a potentially available chemical.

Carbide's Reasons for Policy Change

He said that 75 percent of Carbide's product development is now concentrated on finding chemicals to satisfy actual need, and cited these reasons for the change of policy:

- Higher cost of market development.
- Increasing risks of failure in today's competitive market.
- Competition for evaluation of new products at a given customer's laboratories.

The latter, Mr. Klein said, has loomed largest in Carbide's changed thinking.

"At Carbide," Mr. Klein went on, "we believe the emphasis we have placed on satisfying needs has improved our success in developing new chemicals. The formerly-accepted average time of seven years to bring a new chemical along from the test tube stage to tankcars has now been shortened to four years. The trend is to shorten this even more."

Addressing the same panel, Dr. Robert W. Miller, chief sales development representative for Eastman Chemical Products, Inc., pointed up the importance of new products in the maintenance of healthy profit margins.

Along the same lines as Mr. Klein, he noted that "with the improved knowledge of sources of supply, the purchasing department is in a position to recommend new raw materials for the lowering of costs in existing processes."

"Also," he went on, "with a working knowledge of the chemical potentialities of his suppliers, the purchasing agent is in a position to find a commercial source for needed raw materials not currently on the market."

"Yes, new products do provide a frontier for future growth—perhaps the most important frontier," Mr. Miller concluded, "and, by working together closely, we as suppliers and you as users of new chemical products can make them an important tool in improving and maintaining our companies' profit picture."

Panel Cites Research Costs

In other comments heard at the panel:

- A. D. Johnson, of E. I. duPont de Nemours & Co., noted that duPont has invested over $700 million in research and development over the past ten years, and that its 1960 expenditures alone totaled $96 million.

As a general rule, he said, for each dollar spent on research, duPont has invested nearly three dollars in expansion and construction of plants.

John E. Gaston, of Mallinckrodt Chemical Works, declared that the promise of the sixties can only be realized by firms which gear themselves to "new market concepts" and succeed in maintaining and creating "a corporate face which accurately reflects these concepts."

In Mallinckrodt's case, he noted, this involved a tripartite division of the old, traditional company's corporate structure along market-oriented lines.

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Oils, Fats and Waxes

Feature of the oils and fats markets was the sharp drop—¾ cent to ⅞ cent per pound for tallow and greases. Increased production and poor demand for domestic and export brought prices down to the lowest levels during the past three months. Light trading took place at the decline. Weakness of future markets was reflected in cottonseed and soybean oils and prices declined about ½ cent per pound last week. Corn oil was also lower, while peanut oil was scarce and higher. Crude coconut oil was easier and moderate trading took place at ⅛ cent lower. Copra was quiet and slightly lower.

Firmer tone developed in drying oils as a result of advances in tung, oiticica and linseed oils. Tung oil was sharply higher, up about 1 cent per pound because of the increase of 3 cents in the support price for the 1961 crop. The rejection of lower bids of government owned oil also was a contributing factor in stiffening this market. Linseed oil was boosted 3/10 cent per pound, because of the lower meal market which declined $3 per ton. Trading was active and contracts were reported booked for delivery up to the end of the current season. Oiticica oil was firmer and raised ¼ cent.

Soybean meal was sharply lower and declined $4 per ton. Cottonseed meal was quiet and unchanged. Peanut meal was in limited supply and small lots were held at $2 per ton higher. Linseed meal dropped $3 per ton.

Price Trends

Advanced

Linseed oil, 3/10c. per lb.
Oiticica oil, ¼c. per lb.
Peanut meal, $2 per ton.
Peanut oil, crude, ¼c. per lb.
Refd., ½c. per lb.
Tung oil, ¾c. to 1c. per lb.

Reduced

Cocoa butter, 1c. per lb.
Coconut oil, ½c. per lb.
Copra, $3 per ton.
Cottonseed oil, crude, ½c. per lb.
Refd., ½c. per lb.
Corn oil, crude, ½c. per lb.
Refd., ½c. per lb.
Greases, ¾c. to ⅞c. per lb.
Lard, cash, 3/10c. per lb.
Linseed meal, $3 per ton.
Soybean meal, $4 per ton.
Soybean oil, crude, ⅝c. per lb.
Refd., ⅝c. per lb.
Tallow, ¾c. to ⅞c. per bl.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	June 10, 1960
109.56	111.13	113.82	112.40

For Current Prices See Page 10

Vegetable Oils

Castor—Trading was spotty. Prices were unchanged and steady. No. 1 Brazilian was held at 17¾c. per pound, tankcars, New York, prompt delivery. Domestic oil was without change.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	600,000
Previous week	.....	700,000
Corresponding week, 1960	494,700	1,526,000
Total this year	.....	36,039,000
Corresponding week, 1960	2,429,400	40,730,000

Coconut—Crude was lower, and offered at 11¼c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment and 12¾c., tankcars, f.o.b. New York. Trading was moderate and spotty.

Corn—Crude was easier, with trading at 17c. per pound, tankers, f.o.b. mills, prompt shipment. Refined oil declined to 20.72c., tankcars, New York basis.

Cottonseed—Futures were irregular and lower on the New York Produce Exchange last week. Trading was mixed and chiefly speculative. Liquidation in July carried that delivery down about ½c. while deferred positions lacked pressure and closed only slightly lower. Cash oils were quiet and lower. Refined salad was reduced to 17c. per pound, tankcars, New York, prompt delivery.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, June 9, follow:

	Sales	High	Low	Close
		Cents per Pound		
July	965	15.63	14.98	14.98S
Sept.	145	14.88	14.49	14.49S
Oct.	44	14.25	13.98	13.97@13.98
Dec.	93	14.10	13.84	13.84S
March	68	14.05	13.90	13.85@13.92
May	65	14.08	13.93	13.88@13.93
July, 1962	3	14.08	14.00	13.88@13.93

Total sales and switches, 1,383 contracts.

Crude oil was inactive and weak. Tankcars were quoted at 13¼c. per pound, f.o.b. Valley; 13⅜c. in the southeast and 13c., Waco.

Linseed Oil—Sales were of substantially larger volume ahead of 3/10c. price advance effective last Thursday. Paint manufacturers generally held purchases to final requirements on current crop. Withdrawals against existing balances also were at an accelerated rate. Raw oil, in tankcars, f.o.b., Minneapolis, was up to 13.4c. for June-September; 13.6c., October-December; 14.52c., f.o.b. New York.

Oiticica—This market was stronger reflecting the higher cost of linseed and tung oils. Prices were lifted ¼c. per pound. Tankcars were held at 14¼c. per pound, New York, prompt delivery. Drums were raised to 15¾c. to 16¼c., spot, depending upon quantity.

Olive—Market remained steady, despite light trading on spot and for replacement from abroad. Spanish oil was maintained at $53 per 100 kilos, drums, f.o.b. ports, prompt shipment and Tunisian at $57, drums, c. and f. New York. Stocks on spot ranged from $2.35 to $2.40 per gallon, drums, exwarehouse, with sales at this level.

Peanut—Crude was scarce and higher. Sales took place at 15¾c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was advanced at 19c., tankcars, New York basis.

Soybean—Lower soybeans combined with lack of exports further weakened this market. Crude was up sharply at 11¾c. and closed only slightly lower. Cash oils were quiet and lower. Refined salad was reduced to 17c. per pound, tankcars, New York, prompt delivery.

Tung—Firmer tone featured the market last week, because of increased support price of 3c. per pound and the rejection of low bids for government owned oil, the highest of which 24¾c. per pound, tankcars, f.o.b. Marrero, La., against last sales of 25c., same basis. This resulted in an advance of about 1c. to 25¼c. to 25½c. per pound, tankcars, New York basis for prompt delivery, according to seller. Trading, however, was still slow, though inquiry for oil improved.

The agency rejected all bids for 1,140,000 pounds government owned tung oil last week. The highest bid was reported at 24¾c., bulk, f.o.b. Marrera, La. Offers of 600,000 pounds of oil will be made Tuesday.

Price support for 1961 crop tung nuts has been set at not less than $63.34 per ton and 24c. per pound for tung oil it was announced by the Department of Agriculture. This level for nuts is an increase over last year's $53.50 per ton and 20.9c. for tung oil. Purchase agreements on tung nuts will be available from November 1, 1961 to January 31, 1962 and agreements and loans on oil from November 31, 1961 to June 30, 1962.

Miscellaneous

Cocoa Butter—Demand was limited to actual needs. Prices were lower ranging from 54c. to 59c., per pound, spot, as to quantity.

Flaxseed—Crushers held bids on cash flaxseed at $3.15 a bushel, spot and to-arrive, basis Minneapolis. Offerings were small but enough to satisfy rather light demand. Anticipated curtailment of crush was a limiting factor. Good to excellent crop conditions prevail over major growing areas.

Fats and Greases

Greases—Market was weak and sharply lower, declining ¾c. to ⅞c. per pound. Liberal offers received scant attention. Choice white was merely nominal at 7⅛c. per pound, tankcars, delivered and yellow 6½c., same basis.

Lard—Trading was slow. Cash lard

—Continued on page 63

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Essential Oils, Aromatics

Lemon oil continues to be high-priced and generally unavailable, according to essential oil dealers. Some of them have begun pushing Italian lemon oil which is very little more expensive than some of the California material that is being offered. Another citrus oil, lime, is also said to be tight. Mexican lime is not nearly as scarce on spot as is California lemon, but dealers report that replacement may be difficult. A drought is said to be holding up production south of the border. Spot prices have not reacted to this drought.

An additive for soft drinks which produces a uniformly cloudy appearance and prevents flotation of the essential oil, has been described by the British press. It is a special brominated vegetable oil which is now being made in England and being exported.

This sturge brominated oil is made from maize oil and is light amber in color. It has a neutral bland flavor and a clean odor with no fat. It is mixed with the essential oil to raise its specific gravity to that of the finished beverage.

This keeps the essential oil from separating out and destroying the cloud effect. It also keeps the oil from rising to the neck of standing bottles to form oil rings or oxidize to carvone.

Madagascar exported 540 tons of various essential oils in 1959 including clove, geranium and vetiver. Of this, according to Chemical and Rubber, a publication of the US Department of Commerce, Business and Defense Service Administration, 225 kilograms of clove oil went to the United States.

Madagascar imported 1,695 metric tons of chemical products in 1959. Perfumery, soap, candles, etc., accounted for 8,460 tons and pharmaceutical preparations for 770 tons.

Price Trends

Advanced
Lemon, California, 35c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 10, 1960
143.73	143.55	143.79	145.48

For Current Prices See Page 10

Essential Oils

Lemon—Prices as high as $3 were heard about the trade along with the complaint that there is very little oil.

Several dealers speculated that more oil would become available soon and that the price would advance accordingly.

An interesting development is this: In view of the scarcity of California lemon oil, some dealers are concentrating their selling efforts on Italian oil.

During the past few years when domestic oil has been so cheap, it has been difficult to win new customers for the Italian oil which has been two and sometimes three times more expensive than oil from the West Coast.

Imported Lemon Oil: Italy

	Pounds	$ Value
1960	54,255	$209,433
1959	61,177	245,558
1958	47,274	240,472
1957	70,750	338,820

Source: US Department of Commerce.

Now, however, the domestic oil is not only nearly impossible to obtain but high-priced too. Italian material is now ranging in price between $4 and $6.50 per pound.

Lemons are produced in the following districts in Italy: Mount Etna, Messina, Palermo, Siracusa, Barcellona and Vittoria.

The tree requires well-drained fertile soil and a warm climate with plenty of sun. There must be protection from storms and cold winters, also. Lemon trees do well in the valleys and terraces of the mountains along the coast, but not above altitudes of 2,500 feet.

Harvesting goes on throughout the year, but the crops are larger at some times than at others. Winter lemons bloom between the end of April to the middle of May. The resulting fruit is harvested from late September to late October.

The second bloom lasts from late May to mid or late June. This fruit is harvested from the middle of November to the end of December. This is the fruit that is best suitable for export since it is hardy and stores well.

The third bloom lasts from the end of June to early July. This fruit ripens during January and February of the following year. This crop is poorly suited to export but it is this crop that is used for the production of oil and citric acid.

The fruit of the last bloom matures during March and April and is generally exported.

Lemons are cultivated in the summer. The trees are kept dry and are not irrigated until late July. These trees bloom in August and September and the fruit is harvested during the summer of the next year.

Only the fruit that is damaged and second quality edible fruit is utilized for the production of oil. Not only are the returns higher on fresh fruit, but it has been found that the properties of the oil of this best fruit actually exceed the limits of normal lemon oil.

Price History: Italian Lemon

	High	Low
1960	$3.75	$3.25
1959	$4.50	$3.40
1958	$4.50	$4.50
1957	$8.50	$4.50
1956	$5.75	$5.50
1955	$4.85	$4.85
1954	$7.00	$6.95
1953	$7.00	$5.50
1952	$5.85	$4.50

An industry spokesman pointed out that there is no recognizable difference in the taste of this Italian oil and the domestic oil, so that the Italian material might be readily substituted in many flavor formulations for the California material.

Lime—Because the rainy season in Mexico is about a month overdue, lime oil on spot is a bit tight. Material is not what you would call scarce and prices have not advanced, but dealers report that replacement is difficult.

There is no production of oil going on at the present time, according to a representative of the Union Nacional de Productores de Aceite de Limon.

Even the trees that normally depend on irrigation have suffered because the drought is so widespread, this representative said.

Spot prices for Mexican and West Indian material continue to range between $5.50 and $6 per pound. West Indian expressed continues to range between $6.50 and $7.75 per pound.

Imports Detained at N. Y.
Week Ended May 19, 1961

Caraway seed, 8 lots, 800 bags.
Cassia, 60 lots, 6,794 bales.
Celery seed, 3 lots, 338 bags.
Coriander seed, 149 bags.
Dill seed, 4 lots, 535 bags.
Fennel seed, 82 bags.
Ginger, 7 lots, 922 bags.
Nutmegs, 6 lots, 720 bags.

Aromatic Chemicals

Heliotropin—The Takasaku Perfume Co., Ltd., in Japan has the capacity to produce 110 metric tons a year of heliotropin.

Seeds and Spices

Celery—French material has dropped from 34c. per pound to 33c. per pound.

Cloves—Both Zanzibar and Madagascar material remain at their previously quoted prices—37c. and 33c. per pound, respectively.

Mace — Siauw No. 1 fancy material dropped from $1.40 per pound to $1.35 per pound; No. 1 whole material dropped from $1.35 per pound to $1.30 per pound; No. 2 prime dropped from $1.25 per pound to $1.20 per pound, and No. 2 siftings dropped from $1.17 per pound to $1.15 per pound.

Oregano — Greek material advanced from 25c. per pound to 30c. per pound. Mexican material advanced from 20c. per pound to 22c. per pound.

Pepper—Both Malabar and Lampong

Essential Oils

black peppers advanced from 46½c. per pound to 47c. per pound. Muntok white remained at 57c. per pound.

Vanilla Beans—The market continues steady and unchanged.

Bourbon beans continue to sell for prices ranging between $7 and $7.15 per pound; Mexican cut beans continue to sell for prices ranging between $7.10 and $7.40 per pound, and Mexican whole beans continue to sell for prices ranging between $7.40 and $7.80 per pound.

Industry spokesmen say they expect it to be some little time before anything is decided about the frozen dessert ruling. It was reported that a test case may come up in Chicago in August with regard to this proposed ruling.

Essential Oils Briefs

BOOK ON TERPENES: The Chemistry of the Terpenes, by A. R. Pinder, B.Sc., Ph.D., Senior Lecturer in Organic Chemistry, University College, Cardiff, Wales, 223 pp., John Wiley & Sons, Inc., New York. There are chapters on the following: the essential oils, sesquiterpenes, diterpenes, triterpenes, tetraterpenes, biogenesis of terpenes, and other subjects.

CEDAR-LIKE DRAWER LINING: Novel Craft Specialties is manufacturing a taffeta and cotton padding interwoven with cedar chips for drawer linings. The chips are perfumed with cedarwood oil for added aromatic strength. "Ceda-Pad" is made in Argo, Ill.

Plastics in Ford's Future

—*Continued from page 3*

lined several improvements that would be required in physical and mechanical properties.

Before plastics can be used for structural components, it was stated, they must be "especially improved to overcome the decline of properties at elevated temperatures." Both rigidity and strength now decline excessively at high temperatures.

Other areas requiring improvement are coefficient of expansion, which is now too high, and stress resistance, now too low.

Conversely, the speakers noted, "low temperature performance of plastics as related to impact resistance and fluxural properties is considerably inferior to performance at the higher temperatures." And automotive parts must operate trouble-free at temperatures as low as minus 40 degrees Fahrenheit.

Development of new polymers was held to be only one means for meeting these requirements. Other approaches suggested were:

- Blending or combining present polymers to improve physical properties.
- Development of fillers and reinforcing materials to give more strength and lower thermal expansion.
- Combining of materials during fabrication which will result in the functional improvement of a specific part.

Ozone Oxidation Plant

—*Continued from page 3*

at the new plant. New carload price is 37c. a pound.

Azelaic esters have been tabbed at 41c. a pound for "Emolein 2957 and 2958" lubricant esters, and 41c. for "Plastolein" DOZ and DIOZ.

At the same time, a three-cent-a-pound reduction has been posted for "Plastolein 9078 LT" plasticizer, a proprietary material partially based on azelaic acid.

Other products at the Cincinnati unit are four new, low-cost polymer plasticizers. The materials are identified as "Plastoleins 9722, 9730, 9750 and 9765."

The first is an improved version of "9720" in humidity, outdoor aging, compatibility, extraction and migration, selling at the same price, Emery says.

All four plasticizers are described in technical bulletin No. 424, available from Emery at Dept. S., Carew Tower, Cincinnati 2.

Hydrogen Peroxide Propels

—*Continued from page 7*

on the hydrogen peroxide industry? Should an army of a million be equipped with such belts, one blastoff alone might consume in excess of 50 million pounds of H_2O_2.

Suppose, in the years to come, the belt is improved in range and released for civilian use. Hydrogen peroxide business would rocket to new heights as commuters blast their way into the cities at dawn and home again at dusk (May the New Haven Railroad rest in peace).

There would be no likelihood of melted wax from flying too close to the sun—the moulting downfall of messrs. Dad and Ike. But could we get used to a platinum blond countryside?

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Coating Materials

Plastics for the home and industry set the theme for the ninth annual National Plastics Exposition held in New York last week. Use of plastics is expected to gain in all industrial areas in the next decade. One area that holds considerable potential for plastics is the buildings materials market. Here, the use of plastics will increase ten-fold in the next ten years. One company basic in plastics for construction, predicts that plastics in commercial construction will rise from $450 million today to $4.5 billion by 1970. The company estimates that plastics will account for about 20 percent of the materials being used in home construction by the end of this decade.

Hot water pipes, sinks, flooring and roofing are some of products made from plastic that although in use today will take a larger share of the market in the years ahead.

In other areas of the coatings materials market, prime pigment demand is at very high levels. Producers report that shipments of pigments have reached the rates that are expected for this time of the year. Prices hold firmly and are unchanged.

Casein turned quiet for the week. Buyers seem to be holding out for lower prices, traders report. They add, however, that listings for casein will probably hold. Argentine casein was up ¼ cent and held in the range of 18¾ cents to 19 cents. French casein was not offered. The absence of export licenses is reported to be holding up sales of French casein.

Despite a 12.1 percent reduction in output, stocks of carbon black in April gained 19 million pounds, the Bureau of Mines reports. Accounting for the surplus was a 20 percent drop in shipments.

Price Trends

Advanced
Casein, Argintine, ¼c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	June 10, 1960
104.71	104.69	104.55	103.14

For Current Prices See Page 10

Prime Pigments

Alkali Blue Toner—Demand for alkali blue toner is reported to be at very good levels from all industrial sources. Listings are firmly estalished at $1.30 a pound sources report, with that price in effect since January 1.

Antimony Oxide—Listings remain split, with two producers offering the oxide at 3c. a pound below the currently quoted 30c. Demand for the oxide is reported to be at about routine levels. Supplies are adequate, sources report. No difficulties encountered in getting the ores provided premium prices are met.

Carbon Black—Production of carbon black in April was 12.1 percent below April, 1960 according to reports from the Bureau of Mines. Shipments decreased 20.3 percent from April a year earlier, while stocks were boosted 19 million pounds in the same month.

Exports of carbon black during the first three months of the year amounted to 133.117 million pounds reports the Bureau of Mines. Last year for the same months exports totaled 142.445 million pounds.

The decrease in exports of carbon black has long been predicted by the trade. A decline in carbon black exports is based on the recent construction of overseas plants in many countries that normally imported large quantities of US carbon black.

Miscellaneous

Pine Gum—Steam distilled rosin production of 1,219,850 drums during the crop year was 2 percent above the 1959-60 season. Production held above the 100,000-drum mark during the 9 months of the year and ranged from a high of 107,040 drums in June to a low of 96,410 drums in December, reports the US Department of Agriculture.

Steam distilled rosin production of 1,219,850 drums during the crop year was 2 percent above the 1959-60 season. Production held above the 100,000-drum mark during the 9 months of the year and ranged from a high of 107,040 drums in June to a low of 96,410 drums in December.

Tall oil rosin production set a new high of 419,960 drums, up 10 percent from the 1959-60 crop year. During August, September and October, production was in excess of 39,000 drums per month with an average output for the crop year of 35,000 drums per month.

Total rosin production for the 1960-61 season was reported at 2,009,960 drums, up 5 percent from 1959-60. Output during the crop year was in excess of 2 million drums for the first time since 1951.

Plasticizers—Ester producers find the proposed price increase on vinyl floor tile encouraging. Ester use in floor tile constitutes a good share of overall demand, and recently has been at a fairly low operating capactiy. The price increase indicates to the phthalate ester producers that a boost in business is expected by the floor tile manufacturers, and a consequent increase in ester demand from those quarters.

In the other plasticizer use areas, producers report that wire coatings are generally average, although some coating firm seem to be operating at much higher levels than others.

Slush molding operations are improving. The improvement there based on the favorable response toy buyers made the recent toy show held a few months ago. Calendering manufacturers are reported to be doing well in some respects while others seem to be floundering.

For the overall market picture one company reports that its plasticizers sales will be on the plus side this year. Supplies of the esters are improving. Sources report that generally the supplies of the esters are in good balance in tune with sustained demand. Listings are reported to be firm.

Synthetic Resins

The following preliminary figures show sales in pounds for March, 1961, with the previous month supplied for comparison, as reported by the Tariff Commission:

Sales	March	April
Phenolic and other tar acid resins:		
Molding resins	13,672,734	15,196,852
Laminating resins	3,565,340	3,502,709
Protective coating resins, modified, unmodified except by rosin	1,175,124	1,171,263
Urea and melamine resins:		
Protective coating resins, straight modified	1,672,045	1,507,550
Styrene resins:		
Protective coating resins, straight modified	4,897,982	5,367,548
Vinyl resins:		
Total all types	79,876,723	94,870,350
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	6,364,763	7,543,178
Modified with tar acids, rosin and/or other material except styrene	3,009,392	3,507,548
Polybasic acid types except phthalic:		
Unmodified	298,863	626,043
Modified with tar acids, rosin and/or other material except styrene	231,066	354,421
Rosin modification for protective coatings:		
Rosin, rosin esters, unmodified (ester gums, esterfied with glycerol)	644,079	750,777
Esterfied with other alcohols, pentatery-tritol, glycols, etc.	428,077	887,894
Modifications with phenolic and other tar acid resins	1,754,494	1,584,263
Modifications with maleic and fumaric acids	1,876,896	1,247,836
All other modifications	3,136,811	4,231,667
Coumarone-indene and petroleum polymer resins	14,844,521	17,530,595
Miscellaneous plastics and resin materials	18,459,332	21,050,154

Coating Materials Briefs

ASPHALT SALES IN 1960: Shipments of asphalt increased 2 percent in 1960, according to a survey made by the Bureau of Mines. With the exception of 1957, asphalt sales have shown a steady annual rise, Mines reports. Seventy-three percent of total shipments went to paving operations, an increase of one precent over 1959.

PLASTIC LIFEBOAT APPROVED: Plastic lifeboats of thirty-feet length and seventy-eight-passenger capacity have passed US Coast Guard tests and are in production for two major ship companies, reports Hooker Chemical Corporation, Niagara Falls, N.Y.

Introduced a few years ago, the boats have attracted interest from ship owners due to its reduced maintenance costs. Durez Plastics Division of Hooker Chemical is supplying the resin used in the construction of the boats.

P.A.'s See 1961 Business Topping 1960's

—Continued from page 4

cent reported that the present international turmoil has had no effect on their buying activities.

Commodity Prices

Some prices continued to creep upward in May, but at a snail's pace. Of the total committee members reporting, 17 percent say they are paying higher prices, up a slight 3 percent from last month. While small, this is the largest percentage so reporting since May, 1960.

Those telling of lower prices slipped to 6 percent from 7 percent in April, the lowest percentage since September, 1960. It must be emphasized that this development has been very gradual, far different from the dramatic movements of the post-recession months of 1958.

Purchased Materials Inventories

Inventory reduction is noted again this month, as purchasing executives continue to exercise "hair line" control of purchased materials. While the rate of decline has slowed, those reporting lower inventories outnumber those reporting higher, a situation that has been with us since April, 1960. Certainly, the business improvement noted in the other indicators cannot be attributed to any inventory accumulation.

Employment

May employment figures are again encouraging. The improvement noted since the low point in February of this year continues this month. Only 11 percent report a worsened employment situation, compared to 17 percent last month and 42 percent in February; 30 percent record employment as better, up from 29 percent last month and only 6 percent in February. Some members note that production improvement is prompting direct labor recall, but that indirect labor is still being held to the bone.

Buying Policy

The very moderate lengthening of forward commitments during the first quarter leveled off in April, and the May report indicates little or no change during the past month. Actually, the over-all change in the extent of commitments between January and May has been slight indeed, with close-to-the-belt buying generally prevailing.

Delivery or lead time appears to be the determining factor in most cases, with strong disinclination among our members to speculate on shortages or price increases.

	Percent Reporting				
	Hand to Mouth	30 Days	60 Days	90 Days	6 Mos. to 1 Yr.
May					
Production Materials	8	38	37	12	5
MRO Supplies	27	44	22	6	1
Capital Expenditures	16	6	13	24	41
April					
Production Materials	8	35	40	14	3
MRO Supplies	32	41	22	4	1
Capital Expenditures	15	6	14	20	45

Specific Commodity Changes

The increased price of copper, and most items containing copper, highlights this month's report of specific commodity changes. A few items also received considerable mention.

The "horn of plenty," though pared by inventory reduction efforts, has thus far been adequate to meet the challenge of increased buying activity, and nothing indicative of a general shortage is reported for any item.

On the up side are: copper and copper scrap, copper products, tin, brass, and antimony.

On the down side are: zinc, multiwall paper bags, glycerine, refractories, and hand tools.

In short supply: none.

Ammonia Terminal Slated By Monsanto in Midwest

Monsanto Chemical Company will build a 15,000 ton anhydrous ammonia terminal at a site four miles south of Muscatine Island on the Mississippi River.

The unit will be located on a tract of approximately 500 acres that offers convenient access by both railroad and barge from the company's ammonia manufacturing plant at Eldorado, Ark., and Luling, La.

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Polymers: Emulsions, Suspensions Seen Reaching 1 Billion Lbs. by 1965

Production of emulsion and suspension polymers, estimated at over 700 million pounds last year, is expected to grow to one billion pounds by 1965. Of the total, observers say a bare 3 percent represents the surfactant used in polymerization procedures. In the latex paint field alone, however, trade sources see a 100 million pound potential. Although the bulk of polymers prepared use the suspension method, emulsion polymerization has made a comeback in recent years on the strength of increased volume in organisol and plastisol applications in the vinyl field.

ALKYL ARYLS: POLYMER USE

1961	*29 million lbs.
1960	*27 million lbs.
1959	*26 million lbs.
1958	*24 million lbs.
1955	*22 million lbs.

*Industry Estimate

But the total amount of surfactant used in emulsion polymerization is difficult to pinpoint. Sources point out that surfactants may be used in the initial polymerization and again, later on, in post-stabilization of the latex. The vast amount of standard rubber polymers produced make use of soaps (oleates, stearates) and rosin acids which are inexpensive and do an adequate job. Vinyl chloride, although it is the largest market for emulsifier surfactants, is more often produced by suspension polymerization.

Myriad Monomer Combinations Possible

In emulsion polymerization, a great number of different monomer combinations are possible. The main monomers now used are the acrylates, vinyl chloride and acetate; styrene, butadiene and acrylonitrile.

These monomers may be used alone or in combinations of two and three together for the preparation of polymers. The surfactant finally chosen for a particular polymer recipe is highly specific and once the proper surfactant is found, it must be kept uniform from batch to batch in such properties as molecular weight and salt content.

Thus, although the total use of surfactants in emulsion polymerization is large, it is fragmented by the specificity of the products used and the fact that new latexes are constantly being marketed for which special emulsifier formulations have to be made. Facing this kind of complex market, observers hesitate at attempting to gauge the strength of any one surfactant in industrial emulsification uses.

It is generally agreed that the anionic alkyl aryl sulfonates are widely used because of their price advantage. It's estimated that about 5 percent of sodium benzene sulfonate surfactant is used in emulsion polymerization.

Other anionic and nonionic surfactants are used and the nonionics find wide use in emulsion polymerization of vinyl acetate. Sodium lauryl sulfate is often used in conjunction with lauroyl peroxide as catalyst.

Atlas' HLB System

Atlas Chemical Industries entered the emulsion polymerization field about four years ago. The company pioneered a method of surfactant selection known as the HLB (hydrophile-lipophile balance) system.

By this method HLB values from zero to 20 are assigned surfactants. The lower the value, the more oil soluble the surfactant or surfactant blend is and, conversely, the higher the value the more water soluble it is. The method is based on the premise that all surfactants contain hydrophilic and lipophilic groups in one molecule.

The optimum HLB of a surfactant for performing any surface active function, such as emulsification, detergency, wetting, etc., can be obtained by testing surfactants at various HLB values along with other proposed ingredients in a recipe.

Certain of Atlas "Tweens," "Spans," and "MYRJ" emulsifiers have found use in emulsion polymerization. The company anticipates that emulsifiers used in plastics utilized for film for packaging food will continue to constitute a good growth area during the next few years.

Antara Chemicals, which came out with the "Gafac" line of organic phosphate ester emulsifiers in November, 1960, recommends "Gafac PE510" and "Gafac RE610" of the series for use in emulsion polymerization of acrylate monomers.

Polyvinyl acetate emulsions made by replacing hydroxyethylcellulose as protective colloid with the substantially less expensive "Gafac RE610" showed good clarity and heat and light stability, properties, plus decreased water sensitivity, Antara reports. With protective colloid, PVAc emulsions have been prepared containing 65 percent solids with "RE610."

American Alcolac Corporation, which has done a great deal of specialty work in the emulsion polymerization field, has been marketing the new "Abex" series of surfactants since the beginning of the year. The series adds to the "Sipex" line which is also sold by American Alcolac.

With the "Abex" surfactants, the company hopes it has the answer to a long felt need; a broad-spectrum surfactant suitable for a wider range of monomers. Such a product would do away with the need for use of an anionic and a nonionic in combination.

Also, in production of vinyl acetate considerable amount of protective colloid is needed. The "Abex" surfactants make it possible to dispense with the protective colloid in a recipe, American Alcolac reports .

The "Nacconol" and "Ultrawet" anionic sodium alkyl aryl sulfonates are standard surfactants used in emulsion polymerization. Atlantic Refining Company, one of four basic producers of detergent alkylate, markets "Ultrawet DS" and "K" for emulsion polymerization. The products are available from the company in two densities.

Allied Chemical Corporation's "Nacconols" have been on the market since the 1930's and cover a wide range of all-purpose products with good foaming, wetting, emulsifying and detergent properties.

American Cyanamid Company produces sulfosuccinate and sulfosuccinamate surfactants, derived from maleic anhydride, which are marketed under the "Aerosol" trade name.

Other companies in the field include Witco Chemical Company with "Emcol K-8300," a fatty amide sulfosuccinate; Ultra Chemical Works, a division of Witco, has "Sulframin ABS" and "NAB," alkyl aryl sulfonates; and Geigy Industrial Chemicals, supplies "Sarcosyl NL-30," sodium lauroyl sarcocinate.

Trade Name Briefs

FUELS: A. L. Nugey Associates, Rahway, N.J., reports on a process for rendering aviation gasolines and kerosene rocket fuels non-flammable in storage. The process utilizes "multi-fluorinated additives" which can be automatically removed as the fuels are being pumped into engines for use.

WAXES: Wasco Laboratories has been formed by Kurt J. Wasserman, formerly vice-president and technical director with Hostawax Company and Dura Commodities Corporation.

A plant for manufacturing and warehousing synthetic waxes, resins and allied specialty chemicals has been acquired in Vernon, N.J., and Mr. Wasserman reports the company will produce and sell raw materials as well as serving as sales and service organization for other chemical producers.

ANOTHER "BIG ONE" FROM PERRY—
MULTI-MILLION DOLLAR
LIQUIDATION

MAUMELLE ORDNANCE WORKS
N. LITTLE ROCK, ARKANSAS

STAINLESS STEEL TANKS

6—13,300 gal. vert., 11'-10" x 15'-7", conical top, 3/16" bottom, ⅛" top, 12 gal. top.
3—12,000 gal. vert., 11'-6", closed top, ¼".
18—11,500 gal. Pfaudler horiz. blue glass-lined, 8' x 30', ½" shell, dished heads, nickel coils.
18—3650 gal. vert., 10' x 7', closed, 3/16".
3—3000 gal. vert., T347 SS, 5' x 19', dished, ASME 60 psi.
60—1350 gal. horiz., T347 SS, 4' x 14', dished heads, ASME 60 psi, 38 sq. ft. int. coil.
9—1300 gal. vert., T321 SS, 7' x 4'-6", closed.
3—1100 gal. vert., T347 SS, 4' x 11', dished, ASME 60 psi.
27—476 gal. vert., 4'-6" x 4', open top.
54—475 gal. vert., 5'-6" x 2'-6", open top, dished bottom.
27—445 gal. vert., 6' x 2', open top, dished bottom.
3—300 gal. vert., T347 SS, 4' x 3', ASME 60 psi.
9—285 gal. vert., 41" x 49", open top.
9—260 gal. vert., 40" x 48", closed.

KETTLES—REACTORS

72—Pfaudler 1400 gal. blue glass-lined kettles, 84" x 54", jacketed, open top, Stainless cover, 3 HP Agit.
18—Pfaudler 1250 gal. blue glass-lined reactors (Sulphonators), 72" x 72", closed heads, Agit.
54—Pfaudler 600 gal. Stainless jkt. crystallizing kettles.
72—Pfaudler 250 gal. blue G/L kettles, jkt., Stainless cover.

COMPRESSORS—BLOWERS

3—Worthington 3500 cfm air comp., 24 x 15, #LTC-4, 500 HP gas drive.
1—Chi.-Pneu. 3026 cfm air comp., #19-32-30—18 x 24, steam driven.
3—Elliott 11,620 cfm turbo-blowers, #0, 125 HP.
18—Ing.-Rand 65 cfm air comp., 6 x 6 x 5, type 30, 10 HP.
2—Spencer 24" Stainless turbo-blowers.
40—Stainless blowers & fans, 24" to 42" dia.

BOILERS—HEAT EXCHANGERS—COLUMNS

3—Edgemoor 43.5 HP, 3000 cfm waste-heat boilers, ASME 250 psi.
5—Comb. Eng. 435 HP water-tube boilers, 300 psi, gas or oil fired.
6—1450 sq. ft. T347 SS vert. 3-pass gas condensers.
3—1000 sq. ft. Duriron Cascade-type condensers.
3—564 sq. ft. T347 SS vert. gas condensers (Ammonia burner-pre-heater), ASME 60 psi.
9—400 sq. ft. T304 SS pipe coolers, 2" ips shc. 40 pipe.
12—Amer. Spiral Stainless exchangers: 162, 73 sq. ft.
48—Duriron pipe coolers, open or jacketed: 159, 130, 125, 99, 54, 42, 10 sq. ft.
16—Duriron 24" x 15' packed columns.
1—24" x 33' Duriron & Stainless packed column.
3—18 sq. ft. Steel ammonia evaporators.

STEEL PRESSURE TANKS

9—28,000 gal. horiz., 11' x 38', dished, ASME 75 psi.
2—14,000 gal. horiz., 8' x 36', dished.
2—11,000 gal. horiz., 8' x 27', dished, ASME 300 psi.
5—9000 gal. horiz., 8' x 24', dished, ½".
54—5200 gal. horiz., 6' x 24', dished, 60 psi.

MISCELLANEOUS

25—Worthington 3" x 2" Worthite pumps, #2-CG-2B, 15 HP.
81—Worthington 2" x 1½" Worthite pumps, #1½-CG-1A, 5 HP.
35—LaBour 2" self-priming St. St. pumps, #15-DPL.
8—Graver 10' x 23' lead-lined concentrating drums.
4—Cottrell 88 tube elec.-mist precipitators.
4—2800 gal. vert. Haveg tanks, 7' x 10', open.
25,000'—Stainless Steel pipe, up to 6", all sizes.
10,000'—Stainless Steel vapor pipe; 10", 12", 16", etc.
10,000—Stainless Steel valves, all types & sizes.

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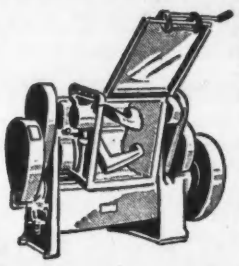
Arms



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SPOTLIGHT SPECIALS

Western States Centrifugal Model UD 3620; 36"x20" Type 316 Stainless Steel.
Sandvik Stainless Belt Dryer 24"x50"; 24" Heated Drums.
Devine Dbl. Door Vac. Shelf Dryer; 20 shelves 86"x78".

PLASTIC and RUBBER EQUIPMENT

Unused F-B 14" x 30" Two Roll Mills
6 Southwark Presses, 36" x 36", 14" Ram
HPM Self Cont. Presses, 7 and 25 Ton
VULCANIZERS: 6'x16', 41"x54", 2'x4', others
Hartig 4½" and 6" Electrically Htd. Extruders; Vented compl. with Drive
NRM 2½" Oil Heated Extruder with Vari-speed Drive, Cumberland Pelletizer
Welding Engrs. 2" Twin S/S Screws; Oil Htd.
Royle 2" Electr. Htd. with Crosshead
NRM 1½" Jktd. with Crosshead; Vari-Drive
Baker Perkins 150 Gal. Disp. Mixer, 150 HP
J H Day Mogul Mixer 150 Gal. V/Cov. 75 HP
Baker Perkins 5 Gal Disp. Mixer, 30 HP

MILLS—PULVERIZERS

2 Stainless Steel Micronizers 30".
Abbe, Ball & Jewell Rotary Cutters; in a wide range of sizes, capacities.
Ball Mills and Pebble Mills by Abbe, Paterson, International, some Jacketed; up to 8' x 8'.
Mikro Pulverizers up to No. 4's.
Fitzpatrick Comminutators; Models D, K and C; motorized.
American Ring Roll Crusher; 50 HP.
Mikro S/S Atomizers; Nos. 6 and 5.
Raymond Imp Mills; many sizes.
Williams Hammer Mills to 60 HP.

COLLOID MILLS

Premier Stainless Model U3; 6" with 15 HP Motor.
Eppenbach QV8 with 5 HP motor.
Chemicolloid Stainless Homogenizer 15 HP; 3525 RPM.
Cherry Burrell Stainless Sanitary Homogenizer Size 1500; 25 HP.
Flowmaster Kombinators Model 200.

MIXERS ALL TYPES

Baker Perkins Jktd. 5 gal. UNE-7, Dbl. Arm Mixer with pressure cover; 30 HP.
Readco Jktd. 15 gal. Dbl. Arm Sigma Blade Mixer.
Baker-Perkins Stainless Steel Lab Mixer; Sigma Arms; 6½" x 9½" x 11½".
Baker Perkins Jktd. Mixers, 50 gal., 150 gal., 200 and 300 gal.

NOW IN STOCK for IMMEDIATE DELIVERY. ALL SIZES FALCON Ribbon Blenders in Steel or Stainless.

CENTRIFUGES

Stainless Centrifugals from 30" to 60"; A.T.&M. Tolhurst, Fletcher, etc.
2 Sharples Stainless Steel Model PN14 Super-D-Canters.
4311 S 1 Sharples C 27 Super-D-Hydrator in Type 316 Stainless with 40 HP motor.
5147 S 13-14 Two Bird Continuous Screen Type Horizontal Centrifuges; Monel & S.S.; 24" x 24".
2 Bird Rubber Covered, 48" with Plows; Fume Tight; 40 HP.

REACTORS—PRESSURE VESSELS

2 Stainless 400 gal. Reactors Jktd. Agtd. by Patterson and Struthers Wells.
6 Dorr-Oliver Stainless Steel Thickeners or Reaction Vessels; 550 gal. 5' x 5'.
Stainless Reactor, 2000 gal. Fully Jktd. Agitated.
Lancaster Stainless Lined Rotary Reactor or Digester; 50" x 17'4"; Jacketed; good for 300 PSI Internal.
Pfaudler Gl. Lined Reactors; all sizes from 50 to 1000 gal.
Mojonnier Stainless Vac. Pans; 3'x10' and 6' x 12'; others.

OLIVER PRECOAT FILTERS

3" x 2" Monel. 5'3" x 8' Stainless.
(2) 5'3" x 3" Steel or Rubber.
Feinc S/S Rot. Vac. Filter 3' x 1'.
Oliver Cont. Rot. Vacuum Filters.
Panel Type; 8' x 8' and 8' x 10'.

FILTERS—FILTER PRESSES

4 Pressure Filters 30" x 56" Type 316 Stainless; 100 sq. ft.
Sparkler Steel Filter Model 33 S 17. S/S Nutsche Type Filter; 6' x 2'.
Bowser Filter with Pump; 2000 GPH.

SPECIAL OFFERING DIRECT FROM LOCATION
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Being Removed as Operations Terminate

2—Allis Chalmers 7' x 22' (2 Compartment) Compeb Ball Mills with Meehanite Liners, driven by a magnetic-coupled 400 HP Motor.
1—Allis Chalmers 9½ x 810 Preliminator or Continuous Ball Mill; Meehanite Liners, driven by a magnetic-coupled 400 HP Motor.
3—Allis Chalmers 7' x 22' Continuous Ball Tube Mills, with Meehanite Liners, each driven by a magnetic-coupled 400 HP Motor, now operating in closed circuit with
3—Raymond 14 Ft. Double Whizzer Mechanical Air Separators, New in 1950, each driven by 75 HP Motor. May be purchased separately. **SEND FOR PRICES AND DETAILS.**

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1—Marco CX 16 Centrifuge type 316 stainless steel. 60 HP Mtr.

5—Sweetland #12 Filters 72 lvs on 2" centers. Deep bottoms. Auto motor driven sluicing.

1—60' Dorrco Clarifloculator Thickener Mech. Complete.

6—Rotary Flame Dryers; 5 x 40', 6 x 35', 6 x 50' and 6' x 60'. Comp.

3—Lawrence type 316 vert 3" Submerged Pumps. 250 GPM @100'.

2—Patterson Steel Ball Mills, 3x4' and 4'6"x4'6". Comp.

2—Tolhurst 48" dia. susp Stain. perf. bask Centrifuges. Mtrs.

1—Roots Connersville 22"x54" type RCDH, 11 900 CFM @28 oz.

ME MACHINERY AND EQUIPMENT CO., INC.
123 TOWNSEND ST. - SAN FRANCISCO 7, CALIFORNIA

Kordite Picks Tyler, Tex. For Plastic Products Facility

Tyler, Tex., has been selected as the site of a third major plant addition for Kordite Company, a division of National Distillers & Chemical Corporation, to manufacture plastic products for the consumer and industrial market.

An integrated producer of polyethylene and polypropylene films for packaging, agricultural, and industrial applications, Kordite established new plants at Jacksonville, Ill., in 1957 and Woodland, Calif., in 1959. Its executive offices and largest plant facilities are in Macedon, N. Y.

For its latest expansion. Kordite has purchased a 43,000 square-foot, one-story building on seventeen acres of land in Smith County, East Texas, 100 miles from Dallas. Initial output of the plant will be devoted to polyethylene films for packaging applications.

Grace Opens Paris Office

W. R. Grace & Co., New York, will establish a Paris, France, office for liaison with its extensive chemical operations in this country. Grace says the new office is expected to facilitate technological contacts between European companies and Grace chemical divisions at home.

ASSOCIATION HEAD: Richard S. Mooney, elected president of Chemical Industry Association. In the business world, Mr. Mooney heads Corprex Chemical Company, Bernardsville, N.J.

CHEMICAL PLANT LIQUIDATIONS

NIAGARA FALLS, N. Y. — EVERETT, MASS.

MODERN EQUIPMENT • ATTRACTIVE PRICES • IMMEDIATE REMOVAL

STAINLESS COLUMNS

78"x18'x¼" Vulcan 318 SS Bubblecap, 14 trays, 180 caps/tray, 50 PSI.
72"x30'x⅛" Budd 347SS Bubblecap, 21 trays, 38 caps/tray.
48"x41'x5/16" Vulcan 316SS Bubblecap, 40 trays 70 caps/tray PSI.
36"x21'x¼" 316 ELC SS Packed, 15 PSI.
36"x20'x3/16" Vulcan 316SS Packed 100 PSI.
14"x17'6"x⅛" 316 SS Packed.
12"x18'8"x3/16" 347SS Packed 100 PSI.
18'x66'—7' cone bottom, ¼" 316SS Packed Absorber Column Stainless Packing.

COLUMNS

72"x16'9"x⅜" Copper 8 Bubblecap trays.
48"x25'x⅛" Copper 35 Bubblecap trays.
42"x28'x⅜" Copper 40 Bubblecap trays.
36"x11'6"x⅛" Copper 15 Bubblecap trays.
20"x27' GLASS LINED 50 PSI full vacuum.
16"x21' GLASS LINED Scrubber.
16"x10' GLASS LINED 25 PSI full vacuum.
84"x25'x⅜" Steel 8 Bubblecap trays.
60"x68'x5/16" Steel 35 Bubblecap trays.
36"x58'x5/16" Steel 35 trays with Reboilers.
30"x61'x⅜" Steel 24 trays.

CENTRIFUGES—FILTERS

Sharples C-27 Super-D-Hydrator Stainless.
Sharples C-20 Super-D-Hydrator Stainless.
40" Fletcher Susp Centrifuge Perf. 15/7½ HP.
30" Susp Centrifuge—Imperforate Stainless.
Sharples #6 Super Centrifuge Stainless Bowl.
5'3"x3' Oliver Precoat Rot Vac Filter SS
4'x1' Bird Young Rot. Vac Filter Stainless.
36"x24" Goslin Rot. Vac Filter Stainless.
48"x36" Stainless Nutsche Filter.
#11 Sweetland 640 Sq. ft. 48 Stainless leaves.
18"x28" Bird Continuous Stainless.

DRYERS—KILNS

8'8"x70' Ruggles Cole Dryer.
8'x60'x⅜" Al. Chalmers Welded Kiln
7'x120'x9/16" Bethlehem Fdy. Kiln.
7'x45'x½" Link Belt Welded Kiln.
684-24 Roto-Louvre Dryer Stainless Steel.
6'x124'x¾" Vulcan Kiln.
502-16 Roto-Louvre Dryer.
4'x40'x⅜" Welded Dryer NEW Shell.
3'x16' Stainless Rotary Dryer.

REACTORS

Pfaudler 500 gal. ELL Gl. Lined Jktd. Agit.
Dopp 1700 gal. Ni-Resist Jktd. Agit.
Dopp 1000 gal. Ni-Resist Jktd. Agit.
Vulcan 1000 gal. Everdur Coiled, Agit.
Patterson 1000 gal. Steel Jacketed.
Buflovak 900 gal. Stainless Agit. Elec. Heat.
Patterson 500 gal. Steel Jktd. Agit. 2 HP XP.
Alloy Tank 750 gal. Stainless Pressure Still.
Alloy Tank 300 gal. Stainless Pressure Still.

COMPRESSORS VACUUM PUMPS

Clark 9920 CFM 149 PSIA Suct 239PSIA Dis.
Al. Ch. Centrifugal 7500CFM @ 42.5PSI, 1250 HP.
Nash #9 Compressors 2150 CFM @ 16 PSI.
Worthington YO 1360 CFM @ 35 PSI; 150 HP.
Worthington 1015 CFM @ 35 PSI Steam Driven.
Norwalk Hydrogen Compressor 5 CFM 1500 PSI.
Nash #4 Vacuum Pump 650 CFM @ 15".

STAINLESS STEEL TANKS

11000 gal. 12'x15'x3/16" Agitated.
11000 gal. 3'x29'6"x3/16" dished 25 PSI.
4500 gal. 6'x25'x¼" dish/cone 25 PSI coiled.
4000 gal. 8'x12'x3/16" dished Coiled.
3500 gal. 8'x9'x5/16" dished heads.
1500 gal. 6'x6'9"x¼" dished heads.
1200 gal. 5'x8'x¼" Agitated.
750 gal. 4'6"x6'x¼" dished 42 PSI.
500 gal. 4'x5'x5/16" dished heads.
500 gal. 4'x5'6"x¼" flat Agitated.
(20) Tanks 50 to 400 gal. some agitated.

TANKS

12000 gal. Aluminum 10'x22'3" dished heads.
10000 gal. Aluminum 9'x23'3" dished heads.
7000 gal. Aluminum 10'x14' dished heads.
3500 gal. Copper 8'x9'x½" dished Coiled.
2000 gal. Copper 7'x7'x⅛" dish Agit Coil.
500 gal. Copper 4'x5'x5/16" dished Coiled.
20000 gal. Steel 12'x24'4"x⅞" dished 100 PSI.
10000 gal. Steel 8'x30' dished Coiled.
10000 gal. Steel 8'x30"x⅜" dished 60 PSI.
6500 gal. Steel 7'6"x20'x¼" dished.
2500 gal. Heresite lined 5'x15'6", 68 PSI.
2250 gal. Steel 6'x19'x5/16" dished 114 PSI.
1250 gal. Steel 5'x8' dished Agit. Coil.

HAMMERMILLS—CRUSHERS

Penna SX13 150 TPH, 400 HP Synch. Drive.
Dixie Mogul #5060 Manganese Lined.
Raymond #50 Imp Mill Model C2-855.
Bacon Hevi-Duty Style B 20"x6" Jaw Crushers.
Universal 5"x6" Jaw Crusher Manganese Jaws.
Sturtevant 8"x5" Double Roll Crusher.

SPECIAL ITEMS

TRIPLEX PUMP—2¼x4 Stainless 2000 PSI.
BLOWER 2500 CFM 10 PSI Read Standardair.
GAS PUMP 20"x20" Roots Connersville "RS."
GAS METER 8"x24" Roots 60000 CFH.
CRYSTALLIZER Squire 40"x30" Agit, Jktd.
CRYSTALLIZER Buflovak 6' Vacuum Jktd. Agit.
CRYSTALLIZER Swenson 24"x20' Jktd.SS 304.
AIR DEHYDRATOR-Anders 8FA Automatic.
ABSORPTIVE DRYER- Kemp FE02-S Dual Tower.
WHIZZER Raymond 30" Double.
SIFTER 30"x96" Roball STAINLESS Screen.
SIFTER 40"x84" Roball Single Deck.
SIFTER 60"x84" Rotex STAINLESS 1 Deck.
SIFTER 48" Sweco-Triple Deck Model A9062.
CONVERTER—St. Wells 10'x29' 10000 sq. ft.
FURNACE—St. Wells 1MM/BTU Oil fired.
HEATER 150KW Hot Oil Hynes Elec. Co.
BRIQUETTE PRESS Komarek Greaves 27"x24".
MIXER 300 gal. B.P. STAINLESS Sigma 18 DIM.
BLENDER Conical 6' Paterson 69CF 10 HP.
BLENDER Conical 12' Paterson 500CF SS clad.
EVAPORATOR—435 Sq. ft. Single Effect.
TUBE MILL Al. Ch. 7'x24' Mang. Lined 500 HP.
BALL MILL Traylor 8'x11' Steel Lined 300 HP.
CENTRIFUGAL PUMPS—STAINLESS—1" to 3" 10 to 750GPM 35 to 100' Head.

CONDENSERS HEAT EXCHANGERS

983 Sq. ft. All Copper ⅝"x16ga.x8' Tubes.
760 Sq. ft. All Copper ¾"x14ga.x14' Tubes.
246 Sq. ft. All Copper ¾"x16ga.x12' Tubes.
6931 Sq. ft. Steel 2"x11ga.x12' Tubes.
1056 Sq. ft. Steel ¾"x16ga.x10' Tubes.
141 Sq. ft. Steel ¾"x14ga.x8' Tubes.

STAINLESS HEAT EXCHANGERS

2320 Sq. ft. 33"x21'—1"x16ga.x16' Tubes.
1000 Sq. ft. 27"x168"—¾"x16ga.x14' Tubes.
890 Sq. ft. 22"x20'8"—⅝"x16ga.x14' Tubes.
800 Sq. ft. 23"x17'10"—¾"x16ga.x16' Tubes.
615 Sq. ft. 22"x15'9"—⅝"x16ga.x10' Tubes.
420 Sq. ft. 18"x9'6"—¾"x18ga.x8' Tubes.
300 Sq. ft. 14"x19'6"—¾"x18ga.x12' Tubes.
235 Sq. ft. 16"x8'3"—⅝"x16ga.x7' Tubes.
188 Sq. ft. 11"x16'8"—⅝"x14ga.x12' Tubes.
146 Sq. ft. 11"x13'10"—⅝"x16ga.x9'6"Tubes.
68 Sq. ft.8"x17'3"—⅜"x16ga.x16' Tubes.

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OPD Reports

USSR Chemical Buying

—Continued from page 5

number of contracts including more chemical plants.

Large exhibition stands from Imperial Chemical Industries, Ltd.; Distillers, Company, Ltd.; and Fisons, Ltd., dominated the chemical section of the fair. But most of the exhibitors were engineering companies and capital equipment suppliers. This emphasis on capital goods, as opposed to consumer goods, was made at the request of the Russians.

Shopping at the fair were trade officials from the Soviet satellite countries as well as Russian trade organizations. Elliott-Automation, Ltd., sold one of its exhibits, a "Panellit 609" data handling and computing system, for $180,000 in Moscow and was invited to send salesmen to Rumania to negotiate sale of a similar system there for a petrochemical plant.

Deals Set With Satellites

R. H. Windsor, Ltd., a plastic machinery company, sold $84,000 worth of extrusion machines in its exhibit, took orders for another $45,000 worth and has inquiries from Polish and Rumania chemical industry organizations.

Timing of the fair to coincide with negotiation of a new Soviet-UK trade agreement, though, has clearly raised some serious second thoughts about how things have been going in Moscow for one segment of Britain's chemical industry—the petrochemical companies subsidiary to major international oil firms.

For Mr. K and all his associates have combined great enthusiasm for all things British with a constant agitation for the UK to buy more Soviet crude oil, hardly a happy thought to the international oil firms.

It is worth noting that the catalog of the fair shows no exhibits from Shell Chemical Company, Ltd., a subsidiary of the ruge Royal Dutch/Shell oil empire.

And the closest big British Petroleum Company, Ltd., another major oil producer, got to the shows was through British Hydrocarbon Chemicals, Ltd., which it owns jointly with Distillers.

The Russian Argument Finds Takers

The Russians have been telling exhibitors that without foreign currency they can't be big buyers and the main thing they have to sell is oil.

Some engineering companies who do almost no business in the Middle East and would appreciate lower fuel prices reportedly find this argument quite reasonable.

For this part, Mr. K. has gone out of the way to applaud the British fair, comparing it favorably to an earlier exhibition which set out to sell a "way of life" instead of goods.

The nylon 66 fiber plant for which Vickers has a contract will produce industrial yarn and tire cord. Vickers-Armstrong, an engineering subsidiary, will supply 93 percent of the equipment on the job, and its German associate company, Hans J. Zimmer of Frankfurt, will supply 76 percent of the Chemical and technical manpower for the job.

The Vickers-Zimmer combine earlier won a contract to supply a plant for nylon raw materials, and this latest order carries the plant on to final fiber production.

DAY HY-R SPEED MILL 20 HP XP
HERSEY 5' x 26'
ROTARY STAINLESS DRYER

CENTRIFUGALS—12" 30" 40" & 48". Amer. Tool 18' Stainless.
CENTRIFUGES—Sharples #5 & 6 S.S.
DRYERS—Hersey 5' x 26' Rotary Stainless
Buffalo 32" x 90" Double Drum Dryer
Buffalo Vac. Drum Dryer 24" x 20".
Despatch Ovens Elec. Heated.
3—Devine & Stokes Vac. Shelf Dryers.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—#2 Sweetland Filter.
Oliver Rot. Vac. Filter 3' x 1'.
Hercules Leaf Filter 36" dia.
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30" & 36" dia.
Steel Alum & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000.
Mikro Pulverizer #4, 2S1, 2TH, ISH.
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #3 & #2XX Hammer Mills.
Taylor-Stiles 7½ HP Cutter.
Rotary Cutters 1 HP & up.
Sprt-Wald Stainless Spike Crusher.
Pebble, Jar & Ball Mills, Lab to 6' x 8'.
3 Roll, 9" x 24", 12" x 30", 16" x 40".
Lehmann 4 Roll W. C. 12" x 36" Steel.
MIXERS—Baker Perkins 100 gal. Jack.
B. P. 15 HP—Masticator Mixer.
Day Imperial 75 & 150 gal.
Change Can Mixers 8, 15, 40, 80 gal.
Day Jumbo 700 gal. horiz. Mixer.
Sprout-Waldron 10,000# horiz. Spiral Mixer.
Blystone 3000# horiz. spiral Mixer.
Day 1000# horiz. Dry ribbon Mixer.
Dry Spiral Mixers 50 to 10,000#.
Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Colton 4½ T.
Stokes R single punch & RD1 rotary.
TANKS—Stainless, GL., Lined, Steel.
MISC. Boilers Gas & Oil. Conveyors.

Partial Listings — Write for Bulletins

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Readco SS J'ktd. 6 qt. Lab Mixer, vac. cover
Day 75 gal. sigma arm Mixer, 7½ HP motor
Oliver 316 SS Filter 6' dia., 25 sq. ft. cap.
Pfaudler 1500 gal. Glass Tank, closed top
Blaw Knox SS 100 gal. Autocl, agtd. 1000 psi
Cavagnaro sig. arm 200 gal. SS mixer, 75 hp
Simpson 24" SS Lab. Mix Muller, 1½ H.P.
Buflovac Lab. 6" x 7" Double Drum Dryer
Ribbon Blenders, SS & Steel, NEW & USED
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NEW STAINLESS EVAPORATOR
Long tube 751-1" OD 12 ga. tubes 15' long. Evaporation rate 17,000# water per hour at 235° F. Entire unit constructed of type 309 and 304 stainless steel.

Immediately Available From Stock

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EQUIPONOMICS
BIRD Continuous Centrifuge 18" x 28" 316 S.S. (1952) 15 H.P. Washing

COLUMN S.S. 4' D x 65' high, 55 plates.
TANKS S.S. 304, 2500 gal. 7' x 8' new.
KNEADER MASTER—Paterson 2½ gal.
COLLOID MILL—Premier UB5 S.S. 5 H.P.
CENTRIFUGE—ATM Susp. 48" 316 S.S., 50 HP.
ROLLER MILLS—Ross 14" x 32" Hi Speed Ross 4½" x 10".
CENTRIFUGE—Tolhurst 20", 40" Rubber Lined.
PEBBLE MILL—Abbe—50 gal.
TABLET PRESSES—DS3, DDS2, Stokes.

PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N.J. Tel. FUlton 1-1103-4

LIQUIDATION
PAINESVILLE, OHIO

2—Kilby NICKEL Dbl. Effect Evaporators, 3400 sq. ft. ea. effect.
2—Kilby NICKEL Dbl. Effect Evaporators, 2000 sq. ft. ea. effect.
1—Kilby NICKEL Single Effect Force Feed Evaporator, 1200 sq. ft. Above with condensers, piping and pumps.
2—12,000 gal. NICKEL Clad Tanks.
5—8,500 gal. NICKEL Clad Tanks, some agitated.
1—1,000 gal. NICKEL Clad Tank.
2—Oliver 5'3" x 4' NICKEL Clad Rotary Vacuum Salt Type Filters.
3—Dorr 80' dia. Thickeners with agitator and drive.
4—Dorr 40' dia. Thickeners with agitator and drive.
3—Vogt 387 sq. ft. Rotary Pressure Filters.
2—Chicago Pneumatic 26" x 14" Vacuum Pumps with 150 HP motors.
4—Feinc 8' x 12' Rotary Vacuum Steel Filters, string discharge.
1—5½' x 4½' x 50' Rotary Dryer.
1—5½' x 4½' x 60' Rotary Dryer.
1—Buflovak 32" x 90" Double Drum Dryer.
1—Sperry 30" C.I. Filter Press, 27 chambers.
2—Pfaudler 300 gal. Glass Lined Jacketed Agitated Reactors.
5—NICKEL Centrifugal Pumps, 2", 3".

COMPLETE COAL PULVERIZING PLANT
Consisting of:
1—Raymond #73612 Super High Side 6-Roll Mill, complete, 40 ton per hour.
4—Fuller Lehigh Mills, 48" and 57" dia., M.D.
2—6'6" dia. x 60' Rotary Dryers.
1—Link-Belt 24" x 90' Troughing Belt Conveyor.
1—Bucket Elevator, 75' high.
3—Fuller Kinyon Pumps.
2—Stainless Steel Gas Scrubbers, 6' x 12', 7' x 14' with fans.
Scales, Bins, Piping, etc.

Partial Listing — Send for Complete Details

BRILL EQUIPMENT COMPANY
35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

BRILL FOR VALUES

CENTRIFUGES
2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
2—Bird 24" x 38" Solid Bowl Continuous 304 SS.
1—Bird 40" x 60" solid bowl continuous, 316 SS, UNUSED.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS
1—Pfaudler 125 gal. 304 SS jacketed agitated Reactor, 150# int., 125# jacket.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
2—Pfaudler 850 and 650 gal. Steel jacketed agitated Reactors.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
2—2700 gal. 316 SS vertical agitated Tanks with coils.
1—4200 gal. 316 SS verticals Tank, 8' x 12'.
1—5500 gal. 316 SS clad pressure Tanks, 250 psi.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—10,000 gal. rubber lined Tank, 10' x 17'6".
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
4—Stainless Heat Exchangers; 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS
1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 4' dia. monel, horizontal Filter.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Hercules 400 sq. ft. 304 SS pressure Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Feinc 3' x 1' 316 SS Rotary vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

DRYERS
1—Buflovak Vacuum Shelf with 17—60" x 80" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Stokes 4' x 20', 304 SS, Rotary Vacuum Dryer.
6—Louisville Rotary Steam Tube 5'x25', 6'x30', 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Louisville 4-1/2' x 25' Incozel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
1—Stokes Model 38-A Tray Dryer with 16—36" x 36" SS shelves.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
2—Wyssmont Dryers, 304 SS, 6'2" and 9'6" dia.

MIXERS
1—Abbe 110 gal. 304 SS Jacketed Agitated Vacuum Dispersal Mixer.
2—Day Imperial 150 gal. jktd. double arm.
2—Baker Perkins 150 and 100 gal. jacketed double arm sigma blades.
1—Baker Perkins 50 gal. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—2' dia. Simpson Intensive Mixer, 304 SS.
1—45" dia. Lancaster Mixer, 7-1/2 HP motor.
1—Patterson Kelly 150 cu. ft. Twin Shell Blender.
1—Patterson 80 cu. ft. conical Blender, 304 SS.

MISCELLANEOUS
3—Kinney Vacuum Pumps, 1000 cfm, 10 micron, 15 HP.
3—Mikro Pulverizers, 1 SH, 1S1 and Bantam.
2—Hardinge 5' x 22" steel lined conical Ball Mills.
3—Mikro Pulverizers, 1SH, 1S1 and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—#842 Rotex Sifters 60" x 84" double deck.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.

Partial List of Values — Send for Complete Circular

TEXAS OFFICE: 4101 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
35-61 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

PERRY FOR PROCESS EQUIPMENT

KETTLES — REACTORS

1—1800 gal. Glascote blue glass-lined reactor, jacketed, ASME 50 psi or vac. int., 90 psi jkt.
1—1800 gal. T316 SS jacketed reactor, 5 HP Agit.
3—1350 gal. T347 SS jkt. kettles, Agit.
1—750 gal. Pfaudler blue G/L jkt. reactor.
1—750 gal. Graver T304 SS jkt. fermenting kettle, shell jacket, ASME 30 psi, 10 HP Agit.
1—600 gal. Bartlett & Snow Stainless crystallizing kettle.
6—465 gal. Downingtown T304L SS reactors, 150 psi, internal, 165 psi jkt.
1—300 gal. Pfaudler blue G/L jkt. reactor, Agit., ASME.
1—300 gal. Glascote blue G/L jkt. reactor, Agit., ASME.
1—225 gal. Stainless jkt. reactor, 200 psi jkt., vac. int., Agit.
1—175 gal. Stainless jkt. reactor, 100 psi jkt., Agit.

STAINLESS STEEL TANKS

1—3300 gal., T304 SS, 6' x 14'6", hemis. heads, coils.
1—3000 gal., T304 SS, 6' x 14', dished, coils.
2—2700 gal., T304 SS, 7'6" x 7'6", turbine Agit., coils.
2—2600 gal., T316 SS, 7' x 8', dished, coils.
5—2100 gal., T304 SS, 8' x 5'6", Agit., coils.
60—1350 gal., T347 SS, 4' x 14', 3/16" shell, ¼" dished heads, ASME 60 psi, 38 sq. ft. coils.
3—850 gal., T304 SS, 4' x 9', dished.
200—Stainless Steel tanks, all sizes, from 10 to 10,000 gal., T304, 316, 347, etc.

DRYERS

1—Buflovak 32" x 72" Twin-Drum Dryer, Chrome-Plated, Stainless Conveyors, Hoods, etc. Late Model!
5—Buflovak 42" x 120" Drum Dryers, ASME 160#.
1—American 42" x 120" dbl. Drum Dryer, ASME, stainless.
1—Buflovak 42" x 90" dbl. Drum Dryer.
1—American 36" x 84" Dbl. Drum Dryer, ASME, Vacuum.
1—Buflovak 5' x 12' Single Drum Dryer, Vacuum.
1—Fischer 36" x 40" Single Drum Dryer.
1—Buflovak 32" x 52" Dbl. Drum Dryer, ASME 100# WP.
1—Buflovak 110 sq. ft. Vacuum Shelf Dryer.
5—Stokes 195 sq. ft. Vacuum Shelf Dryers, #138J-16.
2—Davenport 8' x 60' Rotary Dryers, 7/16" Welded, Burners, Fans, etc.
1—Louisville 4'6" x 25' Rot. Steam-Tube Dryer, Welded.
1—Hardinge 4' x 30' Rot. Steam-Tube Dryer.
1—Bartlett 3' x 15' Rotary Dryer, Everdur Shell.
1—Nerco-Niro Portable Stainless Spray Dryer.

FILTERS — CENTRIFUGALS

3—Sweetland #12 Pressure-Leaf Filters, (72) St. St. Leaves.
5—Shriver 48" Cast Iron Filter Presses, 1250 sq. ft.
6—Valley 36" Aluminum Filter Presses, 1000 sq. ft.
1—Niagara #510-28 T316SS Pressure Filter.
1—Oliver 5'3" x 8' Precoat Rot. Vacuum Filter—Unused.
2—Oliver 5'3" Precoat T316 SS Rot. Vacuum Filters.
10—Davenport Dewatering Presses; #1A, 2A, 3A.
25—Sharples #AS-16V Super Centrifugals, Inconel, Sludge Disch.
3—Sharples #C-20, C-27 Super-D-Hydrators, T316SS.
2—Sharples #16-P cent., T304SS, Pressuretite.
3—Bird 24" x 24", Monel Slotted-Bowl.
1—Bird 24" x 38", Steel, Cylindrical Bowl.
2—Bird 24" x 38", T304SS Conical Bowl, 25 HP.
1—Tolhurst 48" Susp. Cent., T304SS.
5—A.T.&M. 40" Susp. Cent., T304SS Solid, 40/5 HP.
2—A.T.&M. 32" Susp. Cent., T304SS Solid, 30 HP.
1—Fletcher 30" Junior, T304SS Extractor, Perf.
1—A.T.&M. 12" Susp. Cent., T304SS, Perf.

MIXERS — MILLS

50—Baker Perkins #17, 200 gal. Sigma Jktd. Mixers.
1—Baker Perkins #16-UUEM, 150 gal. Dispersion Mixer, 150 HP XP Motor, 125# Jacketed, Vaulted Cover.
1—Baker Perkins #15-UUMM, 100 gal. Dispersion Mixer, 100 HP, ASME Jacket, Cored Blades, Compression Cover, Motorized Tilt.
1—Baker Perkins #15, 100 gal. Disp. Mixer, T347SS, Jkt.
1—J. H. Day #6 Cinc., 100 gal., Sigma Blades, Stainless.
2—J. H. Day #5 Cinc., 75 gal. Sigma Blades.
1—Gemco 60 cu. ft. T304SS Conical Blender.
13—Abbe 6' x 8' Pebble Mills, Stone Lined, 30 HP.
1—#2TH Mikro Pulverizer, 10 HP.
2—Hardinge 7' x 36" Conical Pebble Mills.
1—Allis-Chalmers 5' x 5' Contin. Ball Mill, 75 HP.
1—Raymond 50", 5-Roller Hi-Side Mill, Oil Journals.
1—Raymond 66", 6-roller mill, 200 HP.

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"GEARED TO SERVE YOU"

Stainless Hermann 10" x 10" Filter Press.
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Sparkler Model 10D6 jacketed Filter.
Stokes RDS3 rotary Tablet Press—3 HP XP.
Rosina Model SLC Capper—complete.
Day "Roball" 20" x 48" single deck Sifter.
Abbe 150 gallon jacketed Dispersal Mixer.
New Jersey Pony Labeler—MD.
10-40-500-750-1000 gallon Ball Mills.
Stainless 325 gallon Agitated Tank.
Patterson 4' Conical Blender—10 HP XP.

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SPECIALS

Column: 24" x 22', 316 stain. steel.
Filler: Arenco—for vial filling.
Pebble Mills: Abbe #3, #6 and others.
Dryer: American 24x48" dbl. drum
Dryer: Bowen lab. spray, st. st.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber. 2-speed.
Filter: Sweetland #5 st. st. lined.
Filter: Eimco, drum 16" x 12".
Kettles: Stainless steel 3 to 300 gal. cap.
Dryer: Procter & Schwartz 6-tray st. st.
Pony Mixers: Day #0, #2 and #4.
Centrifugal: AT&M 40" st. st. perf.

Write us or call Sealey 8-1431

Send us a list of your idle machines.

LOEB EQUIPMENT SUPPLY CO.
614 W. Superior St., Chicago 12, Ill.

Hercules Powder Posts Rosin Size Price Cuts

Hercules Powder Company has reduced rosin size prices effective June 12.

The new schedule running through the calendar quarter beginning July 1, 1962, is as follows: pale grades—paste rosin size, 70 percent, tankcars, $10.63 per hundredweight; paste "Pexol," tankcars, $12.63; "Dry X" rosin size, carloads, $15.90; dry "Pexol," carloads, $18.90.

Dark grades—size 704, tankcars, $6.40; defoamed size 740, tankcars, $5.30; paste "Pexol" 242, tankcars, $10.20; paste "Pexol" 243, tankcars, $10.45; dry XXX rosin size, carload, $14.30; dry "Pexol" 240, carloads, $16.95; dry size 248, carloads, $11.15.

Plasticizers: A Closing Gap

—Continued from page 3

Chemical Corporation with PA for its phthalate installation at nearby Nitro, W. Va.

What if phthalic should decline? With PA in tanks now at 19½ cents, there are many in the trade who believe that the market—barely in balance right now—will slip badly, perhaps as early as mid-summer

Replies Carbide in effect: We've taken a steep price drop for phthalic into consideration and, should it happen, our decision to make our own PA still makes sense economically.

FOR THE BEST IN USED EQUIPMENT

1—J. H. Day 3-roll high speed Mill.
1—J. H. Day 5-roll high speed Mill.
6—Blackburn-Smith Presses Leaf Filters, jktd.
2—Rotary double tube Crystallizers.
1—Copper Evaporator, jacketed, 250 gal.
4—U. S. Hoffman Pressure Leaf Filters, jkted. Conical Dry Mixer 192 cu. ft. vol.; 125 cu. ft. opr. vol.; with 15 H.P. Unibrake Motor.
4—Werner & Pfleiderer 200 gal. jktd. sigma blade Shredders.
2—Ball & Jewell #2 Cutters.
4—Link-Belt Vibrating Screens 4' x 8'.
1—Jeffrey Vibrating Conveyor.
1—30" Sperry Filter, closed del., 3-eye, 39-plates, 40-frames.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor.
1—Abbe Pebble Mill 5' x 22'.
1—Sparkler Filter 32-S-28, with Scavenger Plate, steam jacketed, like new.
1—2 qt. Sigma Blade S.S. Mixer.
1—Patterson Steam Jkt. Ball Mill 42" x 36",
1—430 S.S. Tank 3000 gal. vert. ¾ plate.
2—Vacuum Pumps, Gardner-Denver, 5" bore, 4" stroke, with 7½ H.P. motors.
1—#316 S.S. Reactor 265 gal. jkt.
2—Twin Screw Mixers, 120 gal. jkt.
1—Aetna Water Still, 20 gph—new.

Large stock of new and used H.P. Boilers, Tanks, Pumps, Heat Exchangers, Freon Compressors, Stainless Steel & Brass Valves.

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14 SHREDDERS* (Mixers) Baker Perkins, size 17 VL/BB brine Jacketed, double sigma blade, double screw tilt, sleeve bearing type, working capacity 200 gals., total capacity 320 gals., front blade speed 27.5 rpm, back blade speed 18 rpm. 20 H.P. motor 220/440 V.

CAN BE SEEN IN OPERATION

Evaporators—Swenson 250 ton capacity, rubber lined Karbate and Lead Construction.
Tanks—Rubber lined, NEW—Various Sizes. All welded, 8' x 30'—12,500 gal. fuel storage.
Presses—Shriver, 30"—24"—18" sizes.
Crusher—American Pulverizer Co., #AC—2 Ring type, Drop bottom cage, 75 H.P. Motor 1,200 rpm.
Screen—Robbins Vibrex Type—DD 60 x 168. Style M. 10 H.P. Motor.

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PUMPS	FILTERS	AGITATORS	PEBBLE MILLS
TANKS	KETTLES	DISPERSERS	VACUUM PUMPS
STILLS	FILLERS	CENTRIFUGES	ROLLER MILLS
MIXERS	BLENDERS	HOMOGENIZERS	PULVERIZERS

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BUY IT NOW!

Raymond High Side 50" Mill.
Sharples C-27, Super D Hydrator, 316 S/S.
Fletcher Centrifuge, Suspended 48" dia.
Bird Centrifuge 18" x 28", 316 S/S.
Bird 40" x 60" Solid Bowl Continuous, S/S, UNUSED.
Sweetland Filters #7, #12.
U.S. Auto Jet Self-Cleaning Filter 54".
Eimco Filter (New) 4' D x 3' Face, 37 sq. ft.
Swenson Evaporators 3625 & 5780 sq. ft.
Pfaudler 100 gal. glass lined Jacketed Reactor.
Link Belt Dryer, Roto Louvre, 604-24, 316 S/S.
Link Belt Rotorary Dryers 8' x 40'.
Aluminum Tanks 2000 gal.
Orville Simpson Rotex Screens S/D, D/D, T/D.
Vibrating Screens, 5x12, 4x10, 4'x8', 3x6.
Double Cone Blender, S/S, 80 cft.
Sweco Separator 48" S/S.
Exchangers and Condensers 500 to 4000 sq. ft.
Petro Chem Furnace 1,000,000 BTU, UNUSED.

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for CHEMICAL AND ALLIED INDUSTRIES

1—Niagara type 316 SS horiz. filter, Model 136H-245-3.

1—Pfaudler Model XL 1000 gal. glass lined jacketed reactor.

4—Patterson Kelley SS twin shell blenders, 4 qt. and 2 cu. ft.

1—125 gal. SS jacketed autoclave with impeller type agitator and drive, 125 psi jacket, 75 psi internal.

1—Banbury #1 mixer with 30 HP motor.

4—Pfaudler Series P, 5, 20 and 30 gal. glass lined jacketed reactors complete with agitators and drives.

2—Pfaudler Series R 5000 gal. glass lined jacketed reactors, NEW.

1—Pfaudler 750 gal. glass lined reactor, jacketed.

2—Pfaudler Series EM 300 gal. glass lined jacketed reactors.

3—Glascote 500 gal. glass lined vacuum receivers.

2—International SS horiz. jacketed double ribbon blenders, 40 cu. ft., complete with motors.

2—Process Equipment 10,000 gal. SS vertical tanks, NEW.

1—10,000 gal. horizontal rubber lined storage tank.

2—Stokes SS jacketed rotary vacuum dryers, 3'x15' and 2'x6'.

1—AT&M 26" type 316 SS suspended type centrifuge, complete.

5—Tolhurst 40" and 30" rubber covered centrifuges.

1—Sharples type 316 SS Super-D-Canter, PN-14, complete.

1—Sharples type 316 SS centrifuge, Model D-2.

1—Sharples C-20 Super-D-Hydrator, monel.

1—Oliver SS rotary vacuum filter, 3' x 2'.

1—AT&M SS 40" link suspended centrifuge with perforate basket and explosion proof motor.

1—Sperry 36" x 36" heresite covered filter press, 40 chambers.

1—Sturtevant #7 SS dustite rotary batch blenders, NEW.

1—Gemco type 316 SS jacketed conical rotary vacuum blender, 92 cu. ft.

2—Louisville SS rotary dryers, 8' x 50'.

1—Cleaver Brooks 500 HP package steam generator, 125#.

1—Cleaver Brooks 150 HP package steam generator, 150 psi.

1—Superior 300 HP package steam generator, 125 psi.

2—Mikro #3TH SS pulverizers, complete.

3—Pfaudler glass lined thimble type condensers, 9 and 14 sq. ft.

1—300 gal. Hastelloy "B" jacketed pressure reactor.

R. GELB & SONS, INC.
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1—Baker Perkins S.S., 2 arm. Jacketed, vacuum, hydraulic tilt—100 gal., 50 HP.

Stainless Steel Ball Mill.

2—AUTOCLAVES, jacketed, 5'x18', quick opening doors.

2—STORAGE TANKS — S.S. Clad, 11,000 gal.

1—S.S. Storage Tank, 5700 gal.

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COLTON 4, 4½, 2RP, 3RP, 241, 260 Tablet Machines.
OVERWRAPPING AND ALL TYPES PACKAGING EQUIPMENT
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1—Thropp 18x50" Plastic Mill, floor level type, with speed reducer, 125 h.p. motor, brake, etc.

1—American 36x42x84" Autoclave, jacketed, quick opening door each end.

1—G. B. 5x8' Flaker with accessories.

1—Abbe #8 Steel Ball Mill, 20 gal. cap.

2—Jeffrey 24x18 Type A2 Hammer Mills.

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YOUR $ BUYS MORE

MONEL DRYER
Louisville 54" x 35' long Rotary Monel Steam Tube Dryer. 1120 sq. ft. heating surface. 150# pressure. Code constructed. New 1954.

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FILTER—NEW—Stainless, Niagara 48" vertical 512 sq. ft. w/stainless slurry tank.

GRANULATOR — NEW — Stainless Stokes oscillating w/motor.

VOTATOR—NEW—Stainless, lab. model 4 speed.

TABLET PRESSES—Stokes R, B2, DS 3, RD 4 all w/varidrives.

FEEDER/SCREENER — S/S Syntron 24" x72" tot. encl. w/rectifier.

MIXERS — Double arm, unused S/S 3 qt. Read—11 gal. Bramley—25 gal. Fishtail (10 HP)—110 gal. Day Imperial.

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LAWLER PLACE METUCHEN, N.J.
LIBERTY 9-0245

BUY with Confidence

OUTSTANDING MACHINERY-RIGHT NOW! WHEN YOU NEED IT!!

3—Alsop model SD8WR20 type 316 stainless steel portable filters with pumps.

1—Baker Perkins 100 gallon jacketed double arm mixer.

2—Devine #28 double door vacuum shelf dryers 59" x 78".

2—Day 200 gallon jacketed double arm mixers.

1—40" rubber lined suspended centrifuge, perforated basket.

1—400 gallon stainless steel jacketed reactor.

5—Rotex 20" x 37" double deck sifters.

1—Kux #50-A single punch tablet press 1⅛" x 1⅛".

1—Bird 18" x 28" continuous centrifuge, stainless steel.

4—Burrstone pebble mills 400, 250, 100, 50 gallons working capacity.

1—50 gallon Blaw Knox stainless steel agitated and jacketed autoclave.

1—Williams Zenith 3 roll mill.

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chemical & process machinery corp.
52 Ninth St.
Brooklyn 15, N.Y.
HYacinth 9-7200

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1—Groen 100 Gal. S.S. Kettle w/Ag.
2—Sparkler 14" & 8" Stainless Steel Filters.
5—Hercules 16" & 8" Square Stainless Steel Filters.
5—Shriver #1 & #0 Diaphragm Pumps.
1—Homo Mixer #1H—1 H.P. XP Motor.
2—Lightnin Agitators 7½ H.P. 1200 rpm.
1—Charlotte ND20—S.S. Colloid Mill XP Motor—600 gph.
2—Worthite S.S. Pumps 8" x 6"; 3" x 2".
1—Stainless Steel 30 Gal. Autoclave 1000 psi w/Jacket & Agitator w/XP Motor.
2—Cyclotherm Package Boilers 10 & 30 H.P.—#2 Oil—Fully Automatic.
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2—Steel Ball Mills 4' x 5'.
1—N.J. Model 86MX Pony Labeler.
1—Patterson S.S. Gyro Sifter 20" x 48".
4—Rotex Screens 36" x 96" to 60" x 84".
1—Kent High Speed Roll Mill 13" x 32".
1—Pfaudler 800 Gal. G.L. Jack. Tank w/Ag.
2—Day 40 Gallon Pony Mixers, M.D.

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Successor to F. W. Berk & Company, Inc.

Oils, Fats and Waxes

—Continued from page 51

easier, declining to 10.20c. per pound, drums, Chicago.

Tallow—Slow demand for domestic and export, combined with increased production caused prices to drop ¾c. to ⅞c. per pound. Trading was limited on a scale downward. Bleachable fancy was nominal at 6¾c. per pound, tankcars, delivered; prime, 6⅝c.; guaranteed fancy, 7⅛c.; special, 6½c. and No. 1, 6⅜c. to 6½c., same basis. Edible tallow dropped to 9⅛c., same basis. Export interest continued nil. Guaranteed fancy was nominal at 7¼c., bulk, f.o.b. steamer and 8¼c. to 8⅜c., drums, f.a.s.

Cake and Meal

Cottonseed Meal—Trading was slow. Light supplies are well held. Meal 41 percent was unchanged at $62 per ton, sacked, Memphis; $68 to $69, Georgia-Carolina area.

Peanut Meal—Demand was limited to small lots. Supplies are scarce and closely held. Meal 45 percent was higher at $67 per ton, sacked and solvent, $65, f.o.b. Georgia-Alabama area.

Linseed Meal—Pressing supplies in this market forced prices for nearby delivery down $3 ton. Demand was only fair, met by more than ample rate of production. Shipping directions were fair. Extracted meal, 34 percent protein, in carlots, f.o.b., Minneapolis, was nominal at $49.50 for prompt shipment.

Soybean Meal—The Northwest was outstanding exception to generally weak soybean meal market. Prices in this area advanced 50c. a ton, against $4 drop in unrestricted billing and the eastern trunk line. Distress cars were pressed for sale at Decatur. Meal, 44 percent was nominal at $64 a ton, unrestricted, bulk, Decatur, prompt delivery.

Waxes, Vegetable

There was little snap to demand for vegetable waxes. Consumers continued to operate in a hand to mouth manner. Carnauba demand was confined to small lots for actual needs. Quotations were unchanged but sizable lots were shadable on firm bids. No. 3 Ceara crude was offered at 58c. to 60c. per pound, spot, as to quantity and Parnahyba, 60c. to 62c. No. 1 yellow Parnahyba was unchanged but firm due to scarcity of offers for shipment from Brazil. Spot stocks were held at 85c. to 86c. per pound, with No. 3 Ceara ranging from 82c. to 83c., same basis, according to quantity.

Polyethylene Facility

—Continued from page 5

manufacturing site for duPont polyethylene. Until now all of the company's production facilities have been located at the Sabine River Works in Orange, Tex., reputedly the largest single manufacturing plant for polyethylene in the world. The Victoria plant, opened in 1950, also manufactures adiponitrile, an intermediate for nylon.

Obituaries

Merrill W. Dicks

Merrill W. Dicks, Denver, Colo., branch manager for Parke, Davis & Co., died May 30 in Denver. He was forty-one years old. Mr. Dicks had been with Parke-Davis since June 1946.

Starting as a medical service representative, Mr. Dicks advanced rapidly to field manager at Los Angeles, assistant manager of hospital and biological sales at Detroit, assistant manager at the Chicago branch, and in August 1956, Boston, Mass., branch manager. A year later he became head of the Denver branch.

Karl M. Herstein, an industrial chemist who recently retired as president of the laboratories in New York bearing his name, died June 1 in that city. He was sixty-four years old.

Richard M. Page, retired secretary and chief counsel of Ethyl Corporation, New York, died June 4 in New Rochelle, N. Y. He was seventy-two years old.

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DALLAS (DAvis 1-0898)—John Printup & Associates, 2607 Milmar Drive, Dallas 28, Tex.
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SAN FRANCISCO (SUtter 1-5568) — Robert W. Walker Company, 57 Post Street, San Francisco

IMPORTS at United States Ports

New York

AGAR—40 dms, Santander
ALBUMIN—300 bgs, P A Gaynar & Co, Rotterdam
ALUMINUM FLUORIDE—280 bgs, Atlantic Raw Materials, Genoa
ALUMINUM SULFATE—200 bgs, Aceto Chemical Co, Liverpool
640 bgs, Industrial Chemical & Dye Co, Liverpool
ANILINE DYES—67 dms, Heemsoth Kerner, Liverpool
97 dms H Bruckmann & Lorbacher, Hamburg
5 dms, General Aniline & Film Corp, Hamburg
136 dms, Rotterdam
19 dms, Antwerp
ANISE SEED—40 bgs, F D Keller & Son, Vera Cruz
ANTIMONY—20 cks, Watson Geach, Liverpool
ANTIMONY REGULUS—360 cs, Metalchemical Commercial Corp, Rijeka
ARABIC GUM—300 bgs, Chase Manhattan Bank, Port Sudan
500 bgs, Port Sudan
ARSENIC TRIOXIDE—814 dms, American Firstoline Corp, Marseille
ASBESTOS FIBER—5,000 bgs, Johns Manville Corp, Lourenco Marques
4,000 bgs, Johns Manville Corp, Durban
220 bgs, N American Asbestos Corp, Durban
5,000 bgs, N American Asbestos Corp, Lourenco Marques
BARIUM SULFATE—337 cs, Picker x-Ray Corp, London
BEESWAX—120 bgs, Wessel Duval & Co, Rio Grande
84 bgs, Marine Midland Trust Co, Porto Alegre
84 bgs, National City Bank, Porto Alegre
28 bgs, Baldini & Co, Tampico
102 bgs, H H Pike & Co, Tampico
82 blks, Koster Keunen, Djibouti
73 bgs, Puerto Plata
114 bgs, Puerto Barrios
146 bgs, Paranagua
86 bgs, Tampico
21 bls, Progreso
BERGAMOT OIL—40 qu cs, Fritzsche Bros, Messina
20 hf cs, Grace National Bank, Messina
20 hf cs, Tombarel Products Co, Messina
12 hf cs, Messina
BOIS DE ROSE OIL—8 dms, Hollander Trading Corp, Callao
5 dms, J M Rodriguez, Callao
5 dms, Trubek Lab, Callao
CALCIUM CARBONATE—150 bgs, R T French, Hamburg
CALCIUM HYPOCHLORITE—600 dms, Yokohama
CAMPHOR—300 dms, Hostachem Corp, Hamburg
CANDELILLA WAX—188 bgs, Frank B Ross, Tampico
400 bgs, M Argueso & Cc, Tampico
250 bgs, Smith & Nichols, Tampico
313 bgs, Tampico
CARAWAY SEED—200 bgs, R J Spitz, Rotterdam
100 bgs, Foreign & Domestic Sales Corp, Rotterdam
100 bgs, J Bieler, Rotterdam
150 bgs, P H Petry, Rotterdam
300 bgs, C M Van Sillevoldt, Rotterdam
800 bgs, Rotterdam
CARBON, ACTIVATED—10 bgs, Tragacanth Importing Corp, Rotterdam
370 dms, London
CARDAMOMS—25 cs, Wm E Martin & Sons, Puerto Barrios
CARNAUBA WAX—451 bgs, N American Cocoa Trading Co, Salvador
75 bgs, Cornelius Wax Refning Corp, Tutoia
38 bgs, M Argueso & Co, Tutoia
88 bgs, Marine Midland Trust Co, Tutoia
125 bgs, J W Hanson Co, Tutoia
63 bgs, Tutoia
CASEIN—500 bgs, Tupman Thurlow, Buenos Aires
1,000 bgs, Hamburg
CASHEW NUT SHELL LIQUID—300 tons, Minnesota Mining & Manufacturing Co, Lourenco Marques
CASSIA—100 bls, Pesticide Sales Corp, Saigon
300 bls, K H Landes & Co, Saigon
200 bls, M J Golombeck, Saigon
875 bls, W F Mahneke, Saigon
300 bls, R J Spitz, Saigon
150 bls, Rotterdam
CASTOR OIL—300 tons, Baker Castor Oil Co, Recife
CETYL ALCOHOL—200 dms, Olympic Shipping Co, Liverpool
CHESTNUT EXTRACT—700 bgs, Barkey Importing Co, Genoa
2,000 bgs, Barkey Importing Co, Naples
CHLORINATED RUBBER — 600 bgs, Chemical Manufacturing Co, Liverpool
CINNAMON QUILLS—50 bls, V A Cordovi, Colombo
25 bls, Colombo
CITRONELLA OIL—75 dms, Lo Curto & Funk, Puerto Barrios
35 dms, Leonhardt & Brush, Puerto Barrios
25 dms, Givaudan Corp, Keelung
25 dms, Magnus, Mabee & Reynard, Keelung
CLAY, BALL—804 bgs, United Clay Mines Corp, Avonmouth
2,196 bgs, Anglo American Clays Corp, Avonmouth
CLOVE OIL—40 dms, Zanzibar
COCA LEAVES—125 bls, H Bruckmann & Lorbacher, Salaverry
COCONUT OIL—850 tons, Bank of America, Zamboanga
CORIANDER SEED—50 bgs, K H Landes & Co, Rijeka
100 bgs, K H Landes & Co, Casablanca
CORN STARCH—2,700 bgs, Impex Agricultural Corp, Rijeka
600 bgs, Manhattan Adhesives Corp, Antwerp
100 bgs, Rotterdam
CRESYLIC ACID—24 tons, Van Oppen & Co, Liverpool
216 dms, Van Oppen & Co, Avonmouth
CUMIN SEED—100 bgs, Curacao Trading Co, Khorramshahr
273 bgs, M J Golombeck, Khorramshahr
500 bgs, C M Van Sillevoldt, Khorramshahr
1,050 bgs, Khorramshahr
CUTTLEFISH BONE—111 cs, Morgan Guaranty Trust Co, Kobe
100 cs, Morgan Guaranty Trust Co, Nagoya
DAMMAR GUM—70 bgs, O G Innes Corp, Singapore
DEGRAS—100 dms, Hummel Lanolin Corp, Bremen
78 dms, Gallard Schlesinger, Genoa
108 dms, Olympic Shipping Co, Antwerp
75 dms, H A Gogarty, Nagoya
22 dms, Midwest Overseas Trading Corp, Liverpool
DEXTRIN—400 bgs, Bostick Adhesives, Rotterdam
250 bgs, Stein Hall & Co, Rotterdam
ELEMI GUM—132 cs, Kellys America Ltd, Manila
FISHMEAL—4,174 bgs, Marine Midland Trust Co, Chimbote
2,174 bgs, Marine & Animal By Products, Callao
6,391 bgs, Callao
FORMIC ACID—50 dms, Rotterdam
GALI GUM—222 bgs, Morningstar Paisley Inc, Bombay
111 bgs, Tragacanth Importing Corp, Bombay
GELATIN—100 bgs, B Young, London
80 dms, D H Burdett, Avonmouth
73 dms, B Young, Avonmouth
166 bgs, Manhattan Adhesives Corp, Hamburg
50 cks, Havre
GERANIUM OIL—14 dms, Djibouti
GHATTI GUM—120 bgs, P A Dunkel, Bombay
GINGER—103 bgs, Wm E Martin & Sons, London
GLUESTOCK—532 bls, Brown Bros, Barranquilla
GRAPHITE—1,000 bgs, Asbury Graphite Mills, Bergen
250 bgs, Asbury Graphite Mills, Colombo
250 bgs, C Pettinos, Colombo
GUAIACOL—100 dms, Ferro Metal & Chemical Corp, Havre
GUAR GUM—200 bgs, T M Duche & Sons, Rotterdam
2,011 bgs, J L Quesada, Valencia
2,240 bgs, Karachi
GYPSUM—180 dms, L A Salomon & Bro, Liverpool
GYPSUM, CRUDE—20,784 tons, U S Gypsum Co, Hantsport
14,518 tons, Allied Chemical Corp, Halifax
HEPTANOIC ACID—396 dms, International Selling Corp, Marseille
HEXACHLOROETHANE—272 bgs, Henley & Co, Hamburg
ICHTHAMMOL—45 dms, Robert & Co, Marseille
INVERTASE CONCENTRATE—40 cs, White Stokes Co, Glasgow
IODINE, CRUDE—100 dms, Bunge Corp, Yokohama
47 kgs, Chase Manhattan Bank, Yokohama
IRON BLUE—40 dms, Van Oppen & Co, Liverpool
IRON OXIDE—100 bgs, Hudson Shipping Co, Oslo
KARAYA GUM—124 bgs, Bleck Drug Co, Bombay
17 bgs, S B Penick & Co, Bombay
60 bgs, Meer Corp, Bombay
KELPMEAL—150 bgs, E Coast Intercontinental Corp, Bergen
LACTOSE—104 dms, Rotterdam
LAVANDIN OIL—12 dms, Charabot & Co, Marseille
LEAD, WHITE—600 bgs, Rotterdam
LOCUST BEANS—474 bgs, Meer Corp, Rijeka
LOCUST BEAN GUM—30 dms, Oxyphen Products Co, Genoa
500 bgs, J L Quesada, Lisbon
305 bgs, Meer Corp, Genoa
200 bgs, Barcelona
MAGNESIUM CHLORIDE—300 bgs, Interstate Universal Inc, Hamburg
MANGROVE EXTRACT—700 bgs, Saxe Cutch Corp, Singapore
221 bgs, Lourenco Marques
MELAMINE—440 bgs, Yokohama
MENTHOL—250 cs, Lo Curto & Funk, Santos
100 cs, Schwabach & Co, Santos
6 cs, Magnus Mabee & Reynard, Keelung
10 cs, Fleischman Burd & Co, Keelung
MERCURY—100 flks, Leghorn
MOLASSES—1,032 tons, Pacific Molasses Co, Savannah
335,032 gals, American Molasses Co, Bridgetown
8,596 tons, Pacific Molasses Co, Port Esquivel
5,922 tons, Pacific Molasses Co, Kingston
MYROBALANS EXTRACT—1,140 bgs, International Products Corp, Manchester
NAPHTHALENE—1,286 bgs, J N Forker, Liverpool
368 bgs, Koppers Co, Liverpool
2,297 bgs, Witco Chemical Co, Liverpool
200 bgs, Geigy Chemical Corp, Hamburg
2,143 bgs, M W Hardy & Co, Rotterdam
1,056 bgs, Antwerp
1,000 bgs, Rotterdam
NICKEL FORMATE—1,300 bgs, Archer Daniels Midland Co, Bremen
NUTMEG—36 bgs, M J Golombeck, Singapore
226 bgs, Rotterdam
OLIVE OIL—50 dms, Moschaldes Bros, Seville
97 dms, Swiss Credit Bank, Seville
60 dms, Western Food Corp, Seville
50 dms, Manufacturers Trust Co, Seville
10 dms, A Correo Corp, Seville
99 dms, Atlantic Bank of N Y, Seville
OREGANO—250 bgs, M J Golombeck, Piraeus
OURICURY WAX—167 bgs, Smith & Nichols, Salvador
112 bgs, Frank B. Ross, Salvador
PAPAIN—117 cs, Chas L Huisking & Co, Mombasa
16 cs, Mombasa
PECTIN—17 dms, T M Duche & Sons, Copenhagen
27 dms, T M Duche & Sons, Hamburg
PEPPER, BLACK—30 bgs, Kemp Day & Co, Singapore
PEPPER, RED—200 bgs, M J Golombeck, Yokohama
149 bgs, Balfour Guthrie, Dar es Salaam
PEPPER, WHITE—35 bgs, California Commodities Corp, Singapore
70 bgs, Hismoco American Co, Singapore
200 bgs, M J Golombeck, Belem
POLLACKLIVER OIL—50 dms, Arista Oil Products Corp, Yokohama
100 dms, F B Wilcon Co, Yokohama
POPPYSEED—100 bgs, J Bieler, Rotterdam
200 bgs, Rotterdam
POTASH, CAUSTIC—180 dms, B T Chemco Inc, Gothenburg
POTASSIUM GUAIACOLSULFONATE—12 dms, Havre
POTASSIUM NITRATE—110 bgs, Bremen
POTASSIUM PERCHLORATE—236 dms, Ugine Industries, Havre
PYRETHRUM EXTRACT—42 dms, Prentiss Drug & Chemical Co, Mombasa
20 dms, S B Penick & Co, Mombasa
22 dms, Mombasa
QUEBRACHO EXTRACT—3,565 bgs, American Tanners Ltd, Buenos Aires
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RAPESEED—550 bgs, Harts Mountain Products, Rotterdam
RICE STARCH—350 bgs, American Key Products, Trieste
300 bgs, Alpha Chemical Products Co, Trieste
ROSEMARY OIL—12 dms, Seville
SEEDLAC—1,200 bgs, Wm Zinsser & Co, Calcutta
1,250 bgs, United Shellac Corp, Calcutta
200 bgs, Capitol Shellac Corp, Calcutta
SESAME SEED—360 bgs, Sahadi & Co, Puerto Barrios
SODA, CAUSTIC—288 dms, B T Chemco Inc, Gothenburg
SODIUM BICARBONATE—500 bgs, Chemical Manuacturing Co, Liverpool
SODIUM CHLORATE—300 dms, Marseille
SODIUM CHLORIDE—50 dms, Tanatex Chemical Corp, Rotterdam
SODIUM PERBORATE—100 bgs, United Merchants Manufacturers Inc, Leghorn
SODIUM PERBORATE TETRAHYDRATE—1,680 bgs, Chemical Manufacturing Co, Liverpool
SODIUM SILICO FLUORIDE—300 bgs, Hamburg
STARCH—740 bgs, Morningstar Paisley Inc, Rotterdam
TALC—3,680 bgs, Charles Mathieu, Genoa
TARA POWDER—256 bgs, Foreign Domestic Distributors, Callao
TARTARIC ACID—50 dms, Frank Samuel & Co, Marseille
250 bgs, Nylos Trading Co, Genoa
1,000 bgs, Barcelona
TITANIUM DIOIDE—200 bgs, Rotterdam
TRAGACANTH GUM—57 bgs, Am-Iran Corp, Khorramshahr
TRIMETHYLXANTIN—10 dms, Bremen
UNDECYLENIC ACID—57 dms, International Selling Corp, Marseille
UREA—800 bgs, International Chemical Corp, Yokohama
VAN DYKE BROWN—800 bgs, Rotterdam
VANILLA BEANS—36 cs, Morningstar Pasley Inc, Vera Cruz
12 cs, Djibouti
WATTLE BARK—2,155 bls, Bowring & Co, Cape Town
WATTLE EXTRACT—1,006 bgs, International Products Corp, Mombasa
646 bgs, Tanimex Corp, Durban
228 bgs, Barkey Importing Co, ...
ZINC OXIDE—480 bgs, London
ZINC YELLOW—200 bgs, Revelli Chemical Co, Antwerp

Los Angeles

ARABIC GUM—400 bgs, Morningstar Paisley Inc, Genoa
200 bgs, Genoa
COPRA—3,640 bgs, Procter & Gamble Co, Manila
500 tons, Procter & Gamble Co, Tacloban
1,000 tons, Procter & Gamble Co, Dumaguete
3,750 tons, Vegetable Oil Products Co, Cebu
1,000 tons, Vegetable Oil Products Co, Dumaguete
250 tons, Vegetable Oil Products Co, Tacloban
FISHMEAL—600 tons, F P Dow, Callao
295 tons, Chimbote
773 tons, Callao
2,174 bgs, Callao
SESAME SEED—496 bgs, L E Coppersmith, Alexandria
SODIUM CHLORATE—1,333 bbls, Marseille
TAPIOCA FLOUR—4,032 bgs, Morningstar Paisley Inc, Kohsichang
UREA—5,000 bgs, Atkins Kroll & Co, Rotterdam
ZIRCON SAND—460 bgs, Chemical Manufacturing Co, Brisbane
2,008 bgs, Frank Samuel & Co, Brisbane
1,000 bgs, G Young, Brisbane
3,000 bgs, Matteon & Co, Brisbane
300 bgs, Newcastle

Philadelphia

ANTIMONY OXIDE—585 bgs, Glasgow
BONE—8,297 bgs, Oasa Products, Buenos Aires
CASEIN—180 bgs, F H Paul & Stein Bros, Buenos Aires
3,825 bgs, Buenos Aires
CHESTNUT EXTRACT—700 bgs, Chase Manhattan Bank, Naples
CRESYLIC ACID—96 dms, Concord Chemical Co, Glasgow
GYPSUM, CRUDE—11,127 tons, National Gypsum Co, Halifax
8,851 tons, U S Gypsum Co, Hantsport
MAGNESIUM OXIDE—334 bgs, Darlington Chemical Co, Glasgow
600 cs, Glasgow
NAPHTHA—46,877 bbls, Texaco Co, Trinidad
OSSEINE—833 bgs, Antwerp
RAPESEED—110 bgs, Phila National Bank, Rotterdam
TANNIC ACID—10 dms, Glasgow
ZIRCON SAND—17,466 bgs, Sydney

San Francisco

CALCIUM CARBONATE—430 bgs, N Sutcliffe Co, Liverpool
CALCIUM NITRATE—1,200 bgs, Atkins Kroll & Co, Amsterdam
400 bgs, Bradley & Baker, Amsterdam
12,500 bgs, Wilson & Geo Meyer & Co, Heroya
CASEIN—1,500 bgs, E Lang, Buenos Aires
120 bgs, J K Spellacy, Melbourne
1,074 bgs, Western Dairy Products, Melbourne
COPRA—3,200 tons, Cargill Inc, Cebu
FISHMEAL—15,218 bgs, Albumina Supply Co, Callao
5,327 bgs, Callao
28,767 bgs, Chimbote
GLUE—960 bgs, Glasgow
LIVERMEAL—500 bgs, Tupman Thurlow, Timaru
PAPRIKA—600 bgs, B C Ireland, Hamburg
PEPPER, RED—100 bgs, California Commodities Corp, Yokohama
POLYVINYL ALCOHOL—300 bgs, Kobe
POPPYSEED—400 bgs, Fishcrow & Wahr, Gothenburg
SODIUM CYANIDE—100 dms, Chemical Manufacturing Co, Glasgow
UREA—2,500 bgs, Atkins Kroll & Co, Amsterdam
6,250 bgs, Wilson & Geo Meyer & Co, Heroya
ZIRCON SAND—1,962 bgs, Newcastle

Chemical Trade Fears Kennedy Tax Plan

—*Continued from page 3*

desirable under present changing conditions.

He said he has been unable to find any evidence that congress has ever considered that it was a tax "deferral privilege." Rather, he argued, taxability of the parent of its foreign subsidiary earnings only when they become income to the parent is a universally-accepted practice.

The tax systems of other countries do not impose income tax on foreign earnings of foreign subsidiaries owned by their nationals in a manner suggested by the Treasury, Mr. Plumb said, and the US should not institute such a regime that would disturb existing international tax relationships.

Outflow of Capital Cited

"Much has been written about the outflow of capital and the effect of present US tax policies thereon," he stated. "It is suggested that further studies are necessary with respect to all forms of investment abroad and income returned to the United States before any valid conclusions may be drawn regarding the role of our tax policy on this country's balance of payments position.

"The construction or expansion of chemical plants abroad have not been based primarily on tax reasons, but rather for the purpose of maintaining and expanding markets in foreign countries where US corporations face loss of export business by reason of competition, customs unions or other governmental restrictions.

"This foreign growth has demonstrably been accompanied by an increase in exports. Insofar as the chemical industry is concerned, exports for 1960 totaled $1.661 million, an increase of over 100 percent since 1952, while imports of $353 million in 1960 represent an increase of approximately 50 percent since 1952. These expanded exports are experienced simultaneously with growth in investments in chemical plants and facilities overseas. In fact, experience has shown that they are vitally interrelated.

Boost for Tax Neutrality

"In order to maintain orderly expansion abroad, rather than to slow the normal development of United States business in foreign areas, we urge that the principle of tax neutrality receive renewed endorsement by this country, and that the full play of foreign tax systems be recognized, unimpeded by United States tax policies."

Mr. Plumb warned that the Treasury might run into numerous troubles in trying to put its plan into operation without imposing an impossible burden on the parent country.

He pointed out that because of local restrictions on the repatriation of profits, a foreign subsidiary may not be able to remit its earnings (net of foreign taxes) to the US parent as a dividend. In such cases, the US parent would be compelled to pay US taxes, he noted, imposed under the Treasury's proposal, out of its domestic earnings.

"This will certainly deter further US private investment abroad," he said. "But it is by no means clear that the funds would have been invested in the US. It is more likely that they will simply remain uninvested. Meantime, the investment funds of the other industrialized countries will flow into the vacuum. This will stimulate the exports of these other industrialized countries to the competitive disadvantage of US producers."

'Actol': Secret's Out

—*Continued from page 3*

after start-up of Solvay Process Division's polyether plant at Baton Rouge, La.

Allied says it will then become the first US manufacturing company to supply all major components of urethane foam — "Nacconate" di-isocyanates and "Actol" polyethers from National Aniline and "Genetron" fluorocarbon blowing agents from General Chemical Divisions.

What the New York-based concern is aiming at with its new polyethers is a market that is expected to hit 70 million to 80 million pounds this year.

Most of these polyethers will go into flexible urethane foam for furniture, bedding and automotive seating. Smaller but fast-growing polyether markets are in rigid urethane foam for thermal insulating and marine flotation applications. Other promising outlets: urethane coatings and elastomers.

Allied points out that "Actol" polyethers in combination with "Nacconate" di-isocyanates give flexible urethane foams with excellent tensile, compressive and aging properties.

These low-density foams, it adds, may be made with any of the commercial foam production equipment currently used.

Bids Wanted

Castor Oil, Sup 1 qt., 912 cans. Castor Oils, USP, 1 gal., 348 cns. Bid IFB M5-117-61 June 13, Marketing Divisions for Drugs and Chemicals, VA Supply Depot, Somerville, N.J.

Chloroform, USP not for anesthesia, 1 pt. 5320 bottles. Bid IFB M5-117-61, Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N.J.

Formaldehyde solution, Neutral 1 pt. reagent grade, 3972 bottles. Bid IFB M5-117-61, June 13, Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N.J.

Hydrogen Peroxide, solution, USP, 3 percent, 1 lb. 42048 bottles. Bid IFB M5-119-61, June 13, Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N.J.

Iodine, USP, ¼ lb. 2496 bottles. Bid IFB M5-119-61, June 13, Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N.J.

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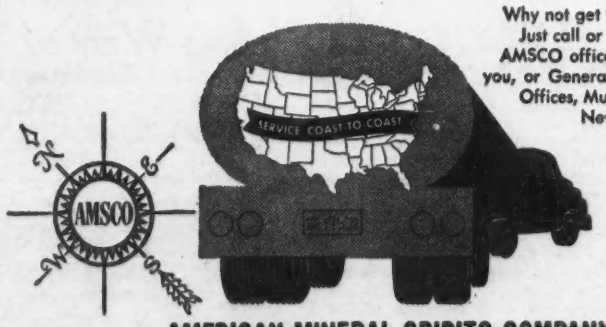

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